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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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                                  Submitted (09-JUL-1998) Chemistry and Blochemistry and the Molecular Biology Institute, UCLA, 405 Hilgard Ave., Los ArCA 90095-1569, USA
                                                                                                                                   Caulobacter crescentus.
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                                                                                                                                                                                                Yokoyama, E., Doi, K. and Ogata, S.
Disruption of the hup gene encoding the
Streptomyces lividans
Unpublished (1999)
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Cloning and sequencing of the hup gene encoding
protein HSl of Streptomyces lividans
Biochim. Biophys. Acta 1353 (2), 103-106 (1997)
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                                                                                                                                 Spoor
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                                                                                                                                                                                                                                                      447 cctgctgaagaaggccgtca 466
                                                                                                                                                                                                                                                                                                                                                       387
                                                                                                                                                                                                                                                                                                                                                                                                                   327 geteaceggeetgtteteegetgagegegteaagegeeeggetegeaceggeegeaacee 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    532 TGAGCTGGTGGCCGCGTGGCCGACCGCGCGAGGTGACCCGCAAGGACGCCGACGCCGT 591
                                                                                                                                                                                                                                                                                                                                                                                       652 CATCCCCGGCTTCCTGACTTTCGAGCGCACCCACCGTGCCGCTCGCACCGCCCCCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        592 GCTGGCCGCCTTCGCCGAGGTTGTCGGCGACATCGTCTCCAAGGGCGACGAGAAGGTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          270 tgttaacgccttccaggatgtgttcgtcga---ggctatgaagtccggcgaaggcctgaa 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          210 tgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaggccgaggctgc 269
                                                                                                                                                                                                                              CAAGCTCAAGGAAGCCGCCA 791
                                                                                                                                                                                                                                                                                                                                      gcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctggctc 446
                                                                                                                                                                                                                                                                                                           GCAGACCGGCGAGCCGATCCAGATTCCGGCCGGCTACAGCGTCAAGGTCTCCGCGGGCTC
  AL138851.1 GI:6911971
bi-functional transferase/deacetylase; carboxy-terminal processing protease precursor; cell division ATP-binding protein; cell division protein; chain release factor 2; DNA binding protein;
                                                                                       AL13885
                                                                                                        Streptomyces
                                                                                                                             SCE59
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
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TVYESRLGFTSALNQWGAHIQLYRECLGGSDCRFGQRNFLHSAVVSGFFKLEGADLVI
PDLRGGFSYLIAALAAQGTSRVHGIDLINRGYENFMDKLVELGAKVELPGKALG*
787 c 836 g 356 t
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complement(987. .2327)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /translation="VMGADDVLLVHGGTPLEGEIRVRGAKNLVPNELVAALLGSAPSR
LNNVPDIRDVRVVRGLLØLHGVTVRPGEEPGELVLDGYTYVESAVVADIDAHAGSSRIP
ILFCGPLIHRLGHAPIFGLGGCDIGGRPIDFHFPDVLRQFGAKIEKRADGQYLBAPORI
RGTKINLPYPSVGATEQVLLTAVLAEGVTELSNAAVEPEIEDLICVLQKMGAIIAMDT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          drttrvtgydelggythralsdrleaaswasaalategnvyvrgaqqrsmmtflntfr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="UDP-N-acetylglucosamine transferase"
/protein_id="BAA85335.1"
/db_xref="GI:6063409"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement (987.
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/product="histone-like protein HSl"
/protein id="BAA85334.1"
/db_xref="GI:6063408"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Streptomyces lividans"
/strain="TK24"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -642-3059
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
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                                                                                                                        35856 bp
                                                                                                          coelicolor
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Pred. No.
                                                                                                                           DNA
                                                                                                          cosmid E59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
on ATP-binding protein; cell factor 2; DNA binding protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.6e-09
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 2327;
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JOURNAL
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REFERENCE
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TITLE
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                                                                                                                                           gene
       SGS
                                                                         misc_feature
                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The more significant matches with motifs in the PROSITE database are also included but some of these may be fortuitous. The length in codons is given for each CDS.

The length in codons is given for each CDS.

Usually the highest scoring match found by fasta -o is given for CDS which show significant similarity to other CDS in the database. The position of possible ribosome binding site sequences are given where these have been used to deduce the initiation codon. Gene prediction is based on positional base preference in codons using a specially developed Hidden Markov Model (Krogh et al., Nucleic Acids Research, 22(22):4768-4778(1994)) and the FramePlot program of Bibb et al., Gene 30:157-66(1994) as implemented at http://www.nih.go.jp/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 jun/egi-bin/frameplot.pl. CAUTION: We may not have predicted the correct initiation codon. Where possible we choose an initiation codon (atg, gtg, ttg or (att)) which is preceded by an upstream ribosome binding site sequence (optimally 5-13bp before the initiation codon). If this cannot be identified we choose the most
                                                                                                                                                                                                                                                                                                                                                                                                                                                    IMPORTANT: This sequence MAY NOT be the entire insert of the sequenced clone. It may be shorter because we only sequence overlapping sections once, or longer, because we arrange for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CDS are numbered coelicolor), 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Streptomyces coelicolor sequencing at The Sanger Centre is funded
by the BBSRC and Beownif Genomics
Details of S. coelicolor sequencing at the Sanger Centre are
available on the World Wide Web.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sanger Centre, Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SA E-mail: barrell@sanger.ac.uk Cosmids supplied by Prof. David A. Hopwood, [3] John Innes Centre, Norwich Research Park,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cerdeno, A.M., Parkhill, J., Barrell, B.G. and Rajandream, M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A set of ordered cosmids and a detailed genetic and physical map
for the 8 Mb Streptomyces coelicolor A3(2) chromosome
Mol. Microbiol. 21 (1), 77-96 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Firmicutes; Actinobacteria; Actinobacteridae; Actinomycetales; Streptomycineae; Streptomycetaceae; Streptomyces. 1 (bases 1 to 35856)
Redenbach,M., Kieser,H.M., Denapaite,D., Eichner,A., Cullum,J., Kinashi,H. and Hopwood,D.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             UDP-N-acetylglucosamine transferase. Streptomyces coelicolor A3(2). Streptomyces coelicolor A3(2)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       upstream initiation codon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (URL; http://www.sanger.ac.uk/Projects/S_coelicolor/)
CDS are numbered using the following system eg SC7B7.01c. SC (S. coelicolor), 7B7 (cosmid name), .01 (first CDS), c (complementary)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Direct Submission
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          strand)
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                                                                                                                                                                                                                                                                                                                                                                                                                       overlap between neighbouring submissions.
                                                                                                                                                                                                                                                                                                                                                                                                 E59
                                                                                               /db_xref="taxon:100226"
/clone="cosmid E59"
complement(1..352)
/gene="SCE59.01c"
complement(1. .352)
                                                                                                                                                                                                                                                  /organism="Streptomyces
/strain="A3(2)"
                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                             'note-"nominal overlap with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 to 35856)
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                                    coelicolor
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/note="SCE59.03c, possible sugar transporter inner membrane protein, len: 281 aa; similar to TR:CAB59590 (EMBL:AL132662) Streptomyces coelicolor putative sugar transporter inner membrane protein SCF11.13, 285 aa; fasta scores: opt: 730 z-score: 883.7 E(): 0; 42.1% identity in 278 aa overlap and to TR:AAF11008 (EMBL:AE001988) Deinococcus radiodurans ABC transporter, permease protein, MalFG family DR1436, 283 aa; fasta scores: opt: 645 z-score: 781.7 E(): 0; 38.2% identity in 772 aa overlap. Contains Pfam match to entry pF00528 BPD transp, Binding-protein-dependent transport systems inner membrane component and match to Prosite entry PS00402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /gene="SCE59.03c"
complement(2210..3055)
/gene="SCE59.03c"
/gene="SCE59.03c"
/note="screening"
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/1016 aa; similar to N-terminal region of TR:09ZBN9
(EMBL:AL034492) Streptomyces coelicolor putative
oxidoreductase subunit SC6C5.06, 296 aa; fasta scores:
opt: 223 z-score: 268.2 E(): 1.6e-07; 37.6% identity in 93
aa overlap and to TR:P95637 (EMBL:U65440) Rhodopseudomonas
palustris 4-hydroxybenzoyl-CoA reductase HbaD subunit, 327
aa; fasta scores: opt: 193 z-score: 233.2 E(): 1.4e-05;
42.6% identity in 94 aa overlap*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="SCE59.02c, probable sugar hydrolase, len: 545 aa; similar to TR:09ZH39 (EBML.AF072374) Pseudoalteromonas sp. S9 beta-N-acetylglucosaminidase (ChiQ, 783 aa; fasta scores: opt: 1378 z-score: 1537.3 E(): 0; 41.6% identity in 512 aa overlap and to SW:HEX1_VIBFU (EMBL:U41417) vibrio furnissii beta-hexosaminidase (EC 3.2.1.52) EXOI, 611 aa; fasta scores: opt: 1023 z-score: 1142.5 E(): 0; 40.0% identity in 487 aa overlap. Contains Pfam match to entry PF00728 Glyco_hydro_20, Glycosyl hydrolase family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /note="Pfam match to entry PF00728 Glyco_hydro_20, Glycosyl hydrolase family 20, score 199.70, E-value 4.4e-56"
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AAARAGHDVVMCPEQQVYLNFREDGGEDEPVPIAFVRTLEDVYRFEPVPAELTPEESG
HVIGTQANLWTEVTENQERVDYQLFPRLAAFAEYAWSALPAPADRDYAAFERRWATHY
RRLDALGVAYRPPAGFRPWQRRPGVLGRPMDGFPPNK"
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PHGGYYTQEDIREIVAYAAARHITVLPEIDVPGHSQAAIAAYPELGNTDVIDTTALSV
WDTWGVSPNVLAPTENTLRFYEGVFEEVLELFPSEFVHIGGDECPKDQWRASATAQAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /translation="MTDLTDVTDATDVIPRPRHAVAQDACFDLGPDTRLVADEGAGHT
ERWLRATLGAATGLPLAPGEGGGGAVRLSLDGELADEGYRLDIAPDGVRLTGGGPAGL
FWGAQTLRQLLGPDAFRRAPLPGRRWRLPLGRIEDAPRFGWRGLMLDVSRHFMPKDGV
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/db_xref="GI:6911973"
/transla++---"
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complement/f/
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/note="SCE59.02c"
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GGTDLMAAVNSGQLRPAALVGLGRISEIRGWQYQDGHALLGAGLTHARMGRPDFAALI
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/protein_id="CAB72188.1"
/db_xref="GI:6911972"
                                                                                                          Binding-protein-dependent
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/product="putative
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codon_start-1
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Matches
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Best Local Similarity
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                                                                                                                                          gcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctggctc 446
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CAAGCTCAAGGAAGCCGCCA 8219
                                                                                                                                                                                                                                 CATCCCCGGCTTCCTGACTTTCGAGCGCACCCACCGTGCCGCTCGCACCGCCACCCC
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                                                      cctgctgaagaaggccgtca 466
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/gene="SCE59.04c"

/note="SCE59.04c, possible sugar transporter inner
/note="SCE59.04c, possible sugar transporter inner
/note="SCE59.04c, possible sugar transporter inner
membrane protein, len: 316 aa; similar to TR:CAB59589

(EMBL:AL13262) Streptomyces coelicolor putative sugar
transporter inner membrane protein SCF11.12, 302 aa; fasta
scores: and to TR:CAB5533 (EMBL:AL11732) Streptomyces
coelicolor putative binding-protein-dependent transport
protein SCF1.13, 317 aa; fasta scores: opt: 527 z-score:
611.6 E(): 1.2e-26; 33.1% identity in 302 aa overlap.
Contains Pfam match to entry PF00528 BPD_transp,
Binding-protein-dependent transport systems inner membrane
component. Contains also possible hydrophobic membrane
spanning regions"
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Binding-protein-dependent transport systems inner membrane
component, score 58.90, E-value 1.1e-13"
complement(2474. .2560)
/gene-"5CE59.03c"
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/db_xref="G1:6911975"
/taanslation="MSSGGVVRGRVRRRRGLSRSSPRPFRGSSSTPWLYLAPALVVLG
/translation="MSSGGVVRGRVRRRRGLSRSSPRPFRGSSSTPWLYLATVVFAA
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/gene="SCE59.04c"
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/note="""
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IESSERTWILTPSLDSFRRVFEQQEFGRYFLNSLIVAGSVVIASALIAFLAATAVTR
FRRFRTTILLMETUAQMVPVEALT IPLFFIMEDFGQLUTLGSLILPHIAFSLPFAI
MLRGFVKAVPEALEEAAYIDGASRTRFLWQILFPLVLPGLVATSVFSFISTWNDFLFA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SQWRIWRSVLAPMLRPILVVVTIQSVIWDFKVFTQIYVMTNGGGIAGQNMVLNVYAYQ
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inner membrane_comp_sign"
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/db_xref="GI:6911974"
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Pred. No. 1.2e-09;
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Nierman, W.C., Feldblyum, T.V., Paulsen, I.T., Nelson, K.E., Eisen, J., Neldelberg, J.F., Alley, M.R.K., Ohta, N., Maddock, J.R., Potocka, I., Heidelberg, J.F., Alley, M.R.K., Ohta, N., Maddock, J.R., Potocka, I., Nelson, W.C., Newton, A., Stephens, C., Phadke, N.D., Ely, B., Laub, M.T., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Laub, M.T., Bolog, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Berry, K., Utterback, T., Smit, J., Craven, M., Khouri, H., Shetty, J., Berry, K., Utterback, T., Tran, K., Wolf, A., Vanathevan, J., Ermolaeva, M., White, O., Salzberg, S.L., Shapiro, L., Venter, J.C. and
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Nierman, W.C., Feldblyum, T.V., Laub, M.T., Paulsen, I.T., Nelson, K.E., Elsen, J., Heidelberg, J.F., Alley, M.R.K., Ohta, N., Maddock, J.R., Elsen, J., Heidelberg, J.F., Alley, M.R.K., Ohta, N., Phadke, N.D., Potocka, I., Nelson, W.C., Newton, A., Stephens, C., Phadke, N.D., Ely, B., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Haft, D.H., Kolonay, J.F., Smit, J., Craven, M., Khouri, H., Shetty, J., Berry, K., Utterback, T., Tran, K., Wolf, A., Vamathevan, J., Ermolaeva, M., White, O., Salzberg, S.L., Venter, J.C., Shapiro, L. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Submitted (31-JAN-2001) The Institute for Genomic Medical Center Dr. Rockville, MD 20850, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Complete genome sequence of Caulobacter crescentus Proc. Natl. Acad. Sci. U.S.A. 98 (7), 4136-4141 (2001)
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AE005869 AE005673
AE005869.1 GI:13423417
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                              complement(1417. .2625)
/gene="CC1958"
                                                                                complement(1417.
/gene="CC1958"
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407...
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407. .1420
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272. .348
                                                                                                                                                             GELAGLDHTLQYAAIGSPETVRRKIDRVLELTGADELMAAAQIHDHAARRRSYEILAS
                                                                                                                                                                                         ESLDRPYAMVCIGVCAADTDEEAKRLSTSTQQQFLALRRGRPGLLPPPVDDIREHASP
note-"identified
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  protein family HMM"
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ASVPPQGGRKHPQQEFLQVDTTNILFICGGAFAGLEKIISARGAAKŠIGFGAKVTDPE
ERRTGEILRNVEPDDLQRFGLIPEFIGRLPVVATLEDLDEAALVKILTEPKNAFVKQY
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knndvelaksnillvgptgtgktllaqtlariidvpttmadattlteagyvgedveni
                                                                                                                                                                                                                                                                                                   /product="ATP-dependent Clp
Clpx"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complement(6325. .7587)
/gene="CC1961"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    complement(6325.
/gene="CC1961"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KTQREYILNEQMKAIQRELGDPDDARDELIDLEKRIKKTKLSKEARTKAESELKKLRN
KSPMSAESTVVRNYLDWLLSITWGKAKTKKIDLVESEGILDHYGLEKVKERILEYL
AVQARTNSLKEPILCLVSPPQYGKTSLGKSIAKATGREFVRMSLGGVRDEAEITGHRR
TYIGSMPGKVVQSMKKAKTTNAFVLLDEIDKMGSDYRGDPASALLEVLDPSQNSTFGD
HYLEVDYDLSQVMFVTANSLMMPQPLLDRWEIIRIPGYTEDEKLEIAKRHILPKLAK
DHGLKPAEFFYDDKAIRULTHYYTREAGVRSLERELGARKTUVRDLAREKVASITIG
DERLAKYAGVKKYRYGETDEVDQVGIVTGLAWTEFGGDILTIEAVKMPGKGRMQITGN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QILLVTQKNSADDDPAPGDIFEVGVLATVLQLLKLPDGTVKVLVEGKARAAVVSFTDQ
ESYYEAQIGEVSEDDGAGPEAEALSRAVVEQFENYVKLNKKVPPEALASIPQIAEPGK
LADSIAAHLSVKIGDKQNLLEIFDVVKRLEKVFALMEGEISVLQVEKKIRSRVKRQME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /translation="MTTKAELVTAIAEKAGINKNQAKDALEAFIEAVTDSLKSGQDVR
LVGFGTFKAVTRAAGTARNPRTGETVNRPASKTARFQVGEGLKSSLNS"
complement(3531..5930)
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/db_xref="GI:13423419"
/tanslation="#mfrrpAqSLGPELQPETRSLGDEPVRLYDTTMLYAPRSGGVRR
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ERLIRQQPDLIEAGDPYTPGLAALRAGDALGVPVVGFCHTDLGKLAALHIGDWAEKPV
                                                                                                   VLKLLQAADYNVERAQRGIVYIDEIDKISRKSDNPSITRDVSGEGVQQALLKIMEGTV
                                                                                                                                                                                                                                                                                                                                                                                                                                            TIGR00382"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LKDVMKESTAAANSYVRSRALQFGIKPPVFEKTDVHIHVPDGATPKDGPSAGIAMALA
MVSVLTGIPIRKDIAMTGEITLRGRVTAIGGLKEKLLAALRSGVKTVLIPQENEKDLA
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/protein_id="AAK23935.1"
/db_xref="GI:13423421"
/translation="MSELRTLPVLPLRDIVVFPHMVVPLFVGRDKSVRALEEVMRGDK
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/gene="tRNA-Val-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DVPQTVKDGLEIIPVSTVDEVLKHALTGPLTPVEWNEAEEPITTSAKKDDGDSDAMLT
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                                                                                                                                                                                                                                                                    /protein_id="AAK23936.1"
                                                                                                                                                                                                                                                                                                                                                                           /codon_start=1
/transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'note-"identified
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/protein_id="AAK23934.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="tRNA-Val"
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                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                     201 caacaagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaaggc 260
TAATCCCCGTACCGGTGAGACCGTCAACCGTCCCGCGTCCAAGACGGCCCGCTTCCAGGT 3143
                                                                                                           cctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccg 380
                                                                                                                                                                                                     cgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaagg 320
                                      caacccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgc 440
                                                                                                                                                                         CAAGGACGCGCTGGAAGCCTTTATCGAAGCGGTTACGGACTCGCTGAAATCGGGCCAAGA 3263
                                                                                       152;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /product="trigger factor"
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/db_xref="GI:13423425"
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AGGEDLSFDLAVEVMPEFEPIDPTSIELVKPYYKVSDEEVQEALDELAKQARTYEPRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           complement(9480. .10838)
/gene="CC1964"
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GMAASMGSLLLAAGAAGQRISLPNARIMVHQPSGGFRGQASDIERHAEDIIKTKRRLN
EIYVKHCGRTYEEVERTLDRDHFMSADEAKAWGLVDHVYDSRDAAEAGAE"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LTPALLAYVEDRNIGKLKAAAVRQFLKGATVAQIENDARAFABAFABLLREDAVAVW RGWRAKGAKWYIVTASPDLIVAPFARGIGADLLIGTRLECSDGGRILGGDDGNNCRAK EKVIRLREVFGPDVRLTAAYGDTSGDTEMLAIADEKGYRIFRGKPA" complement (8670. 9302)
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/protein_id="AAK23938.1"
/db_xref="GI:13423424"
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/note="identified by match to TIGR
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/db_xref="GI:13423423"
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Pred. No. 3.2e-09;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441 tggctccctgctgaagaaggccgtcacc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20302)
DeShazer, D., Brett, P. J.; Burtnick, M. N. and Woods, D.E.
Molecular characterization of genetic loci required f
of exoproducts in Burkholderia pseudomallei
J. Bacteriol. 181 (15), 4661-4664 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (30-NOV-1998) Microbiology and Infectious Diseases, University of Calgary, 3330 Hospital Dr. NW, Calgary, Alberta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DeShazer,D., Brett,P.J., Burtnick,M.N. and Woods,D. Direct Submission
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Burkholderia pseudomallei
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Best Local :
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262 gaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggc 321
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                                                                                                                                                                         Score 75.2; DB 1;
Pred. No. 1.5e-07;
                                                                                                                                                         Mismatches
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                                                                                                                                                                                               Length 20302;
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EGEAARLAALRGTEADFVLLARRYEEMLASHEETOPIDPREHARRDHAFHRAISEASH
NPVLVHTLOSLNELLLLSTVFASVNNLYHRPPOKROIDROHARLYAALREROPDOAORA
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AGRKNAFPAVGRISPDYYCMDGSIPRRELPRVLHGIAELSREYGLRVANVFHAGDGNM
HPLILFDANLAGELERAEALGGRILELCVAVGGSITGEHGVGREKINQMCAQFNADEL
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ECDGLSAYRCTPLIVALPERIEQVQGLLAICHRLKVPVVARGAGTGLSGGALPLENGV
LLVMARERRILEIDPLGRAFARVQPGVRNILAISQAAAPHGLYYAPDPSSQIACSGIGNV
AENAGGVHCLKYGLTVHNLLQVDIVTLEGERLSIGSSALDSAGFDLLALFTGSBELIG
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                                                                                                                                              AREHTHSTRDNLRETEQEEQRLVRATLRLNGWG"
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ATVGGYLASGLSGPRRPWAGAVRDFVLGTRLISGLGTHLRFGGEVMKNVAGYDLSRLL
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Query Match
Best Local Similarity
Matches 145; Conserv

Conservative

11.4%;

Score 68.2; DB 1; Pred. No. 9.3e-06; 0; Mismatches 128

Length 393; Indels

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AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2231 ACCCTGGTCGGTTTCGGCACCTTCCTGCAACGCCATCGCGGAGCCCGCACGGGGAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2291 CGCGTTCTCAACGCCCTGTTGGATGAAATCACCGGCGCGCGTGAACCGCAAGGACAGCGTG 2232
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                                                                                                                                                                                                                                                                                                                      Direct Submission
Submitted (05-SEP-1998) Shanghai Institute of Biochemistry,Chinese
Paradamy of Sciences, 320 Yue-Yang Road, Shanghai 200031, China
                                                                                                                                                                                                                                                                                                                                                                                                                              J. Biol. Chem. 273 (32), 20568-20574 (1998)
98352101
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Rh1zobium leguminosarum
AF090448
                                                                                                                                                                                                                                                                                                                                                                                          Hu, H.L. and Hong, G.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Liu, S.T., Chang, W.Z., Cao, H.M., Hu, H.L., Chen, Z.H., Ni, F.D., Lu, H.F. and Hong, G.F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
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101 c 115 g 86 t
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146; Conserv
                                                                                                                                                                                                                                                                                                                                  Yokoyama, Kyushu University, Faculty of Agriculture, Institute of Genetic Resources, Microbial Genetics Division; Hakozaki 6-10-1, Higashi-ku, Fukuoka, Fukuoka 812-8581, Japan
[E-mail:yokoyama@agr.kyushu-u.ac.jp, Tel:81-92-642-3059,
                                                                                                                                                                                                                                                                                                                                                                                     Submitted (20-SEP-1999) to the DDBJ/EMBL/GenBank databases. Eiji whited (20-SEP-1999) to the DDBJ/EMBL/GenBank databases. Eiji
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Streptomyces lividans (strain:TK24) DNA.
Streptomyces lividans
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Streptomyces lividans hup2
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Yokoyama, E., Doi, K. and Ogata, S.
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TITLE
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JOURNAL
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MEDLINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           326 CAGGCCGCCGACGCTGTCGACGCGGTCCTGGACGCCCTCGTCCGTGCGGTCGTCGCGGGC 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256 caggccgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggc 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              436 tecgetggetecetgetgaagaaggeegteaceg 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      386 GACCGGGTCTCGGTCACCGGCTTCGGTTCCTTCGAGAAGGTCGACCGCCCGGCCCGGTTAC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        122;
                                                                                                                                                                                                                                                                                                                                                                  Submitted (23-JUL-1998) Streptomyces coelicolor sequencing project, Sanger Centre, Wellcome Trust Genome Campus, Hinxton, Cambridge CB10 1SA E-mail: barrell@sanger.ac.uk Cosmids supplied by Prof. David A. Hopwood, [3] John Innes Centre, Norwich Research Park, Colney, Norwich, Norfolk NR4 7UH, UK
3 (bases 1 to 42210)
Redenbach, M., Kieser, H.M., Denapaite, D., Eichner, A., Cullum, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Streptomyces coelicolor A3(2).
Streptomyces coelicolor A3(2)
Bacteria; Firmicutes; Actinobacteria; Actinobacteridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3-isopropylmalate dehydratase large subunit; 3-isopropylmalate dehydratase small subunit; 3-isopropylmalate dehydratase small subunit; 3-isopropylmalate dehydryl transferase; branched-ohain amino acid aminotransferase; carboxyl transferase; delta-1-pyrroline-5-carboxylate dehydrogenase; gltX; glutamyl-tRNA synthetase; histone-like DNA binding protein; hydrolase; ilvE; leuB; leuC; leuB; lyase; secreted lyase; transfer-RNA-Glu; ureAB; urease alpha subunit; urease beta and
                                                                                                                                                                                                                                                                            A set of ordered cosmids and a detailed genetic and physical map for the 8 Mb Streptomyces coelicolor A3(2) chromosome Mol. Microbiol. 21 (1), 77-96 (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Murphy, L. a. Unpublished
The more significant matches with motifs in the PROSITE database are also included but some of these may be fortuitous. The lengt
                                                                  (URL; http://www.sanger.ac.uk/Projects/S_coelicolor/) CDS are numbered using the following system eg SC7B7.01c. SC (S. coelicolor), 7B7 (cosmid name), .01 (first CDS), c (complementary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parkhill, J., Barrell, B.G. and Rajandream, M.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gamma subunits; ureC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AL031124.1 GI:3355667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                       Details of S. coelicolor sequencing at the Sanger Centre are available on the World Wide Web.
                                                                                                                                                                                       by the BBSRC.
                                                                                                                                                                                                            Streptomyces coelicolor sequencing at The Sanger Centre is funded
                                                                                                                                                                                                                                                            97000351
                                                                                                                                                                                                                                                                                                                                                 Kinashi,H. and Hopwood,D.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Actinomycetales; Streptomycineae; Streptomycetaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 42210)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            and Harris, D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 to 42210)
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Pred.
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1.8e-05;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 970;
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                                                                                                 misc_feature
                                                                                                                                                                                           misc_feature
                                                                                                                                                                                                                                                                                   misc_feature
                                                                                                                                                                                                                                                                                                                                 misc_feature
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prediction is based on positional base preference in codons using specially developed Hidden Markov Model (Krogh et al., Nucleic Acids Research, 22(22):4768-4778(1994)) and the FramePlot program
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Usually the highest scoring match found by fasta -o is given for CDS which show significant similarity to other CDS in the database. The position of possible ribosome binding site sequences are given
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IMPORTANT: This sequence MAY NOT be the entire insert of the sequenced clone. It may be shorter because we only sequence overlapping sections once, or longer, because we arrange for a small overlap between neighbouring submissions. Cosmid IC2 lies between 8D9 and 7Al on the AseI-B genomic restriction fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               correct initiation codon. Where possible we choose an initiation codon (atg, gtg, ttg or (att)) which is preceded by an upstream ribosome binding site sequence (optimally 5-13bp before the initiation codon). If this cannot be identified we choose the most
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   jun/cgi-bin/frameplot.pl. CAUTION: We may not have predicted the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of Bibb et al., Gene 30:157-66(1984) as implemented
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         where these have been used to deduce the initiation codon. Gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /gene="SCIC2.01"
/gene="SCIC2.01"
/note="SCIC2.01, probable delta-1-pyrroline-5-carboxylate
/note="SCIC2.01, probable delta-1-pyrroline-5-carboxylate
dehydrogenase, partial CDS, len >408 aa; similar to many
delta-1-pyrroline-5-carboxylate dehydrogenase (M.
tuberculosis) (543 aa), fasta scores; opt: 1753 z-score:
2214.2 E(): 0, 65.1% identity in 407 aa overlap, and
pUT2_HUMAN delta-1-pyrroline-5-carboxylate dehydrogenase
(563 aa), fasta scores; opt: 1273 z-score: 1730.4 E(): 0,
48.5% identity in 408 aa overlap. Contains PS00687 and
PS00070 Aldehyde dehydrogenases glutamic acid active site
and cysteine active site and Ffam match to entry PF00171
aldedh, Aldehyde dehydrogenases, score 114.70, E-value
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /translation="Idspcelidfwrfnvhyarnilaeqppansqgvwnrmdhrpleg
fvyaitpfnfsaiaanlptapalmgnvvvwkpsptqthaavllmqlleeaglpkgvin
lytgdgiavsevalehrdlagihftgstktfqhlwktvgnniekyrtyrlvgetggk
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<1. .1228
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/strain="A3(2)"
/db_xref="taxon:100226"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DFLYAHPSADRAYLKTALTRGAFEYQGQKCSATSRAYIPASIWNDGFKEEFAAEYDYL
TMGDYTDLSNFIGAYIDERSFAKNKAAIDRAKEDETCTIYAGGSYDDSYGYFYRPTYV
ECTDPENEYFRTEYFGPFLAVHYYDDSADDAYDAMLTQMESYSDYALTGSVISNDRAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="delta-1-pyrroline-5-carboxylate dehydrogenase"
/protein_1d="CAA1968.1"
/db_xref="GI:3355668"
                                                                                                                                                                                                                                                      dehydrogenases, score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KETLVAPTDYTYPHMG"
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                                                                                                                        /note="PS00687 Aldehyde dehydrogenases glutamic acid
                                                                                                                                                                        /gene="SC1C2.01"
                                                                                                                                                                                                                                                                                                 /note="Pfam match
                                                                                                                                                                                                                                                                                                                                   /gene="SC1C2.01"
                                                                                                                                                                                                                                                                                                                                                                                                                          /note-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>AAYTMEKLRYAAGNFYINDKSTGAVVGQQPFGGGRASGTNDKAGAPQNLMRWTLTRAI</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /db_xref="SPTREMBL:086502"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=2
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'gene="SC1C2.01"
                                                                                                                                                                                                                                                                                                                                                                                                                 true overlap with cosmid
                                                                                                                                                                                                                                             to entry pF00171 aldedh, core 114.70, E-value 1.8e-
                                                                                                                                                                                                                                                                                             Aldehyde
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ø
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/note="hairpin_loop with 18bp stem'

/note="PS00070

Aldehyde dehydrogenases

cysteine active

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gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SdC
/translation="MTTPTIELKPSAHPLSDSERAAILANDGFGRHFTDHMYTIKWTE GRGWHDGQLVPYAPLSLDPATWYLHYAQEIFBGLKAYKREDGSYNTFREEKNGARFQA SSRRLGWEPUTFIEACDALYAQDEKWYPAHGGEESLYLRPFMIATEVGLGVRPAN EYLFIYIASPAGAYFPGGVKPVSIWYSEDRVRAVPGGWGDAKTGGNYAASLLAQAEAA AKGCDQVCYLDAIERKWYEELGGMNLYFYYGNKIVTPSLTGSILEGVTRDSLLTVARD AKGCDQVCYLDAIERKWYEELGGMNLYFYYGNKIVTPSLTGSILEGVTRDSLLTVARD
                                                                                                                                                                                                                                 /note-*SCIC2.04, ilvE, probable branched-chain amino acid aminotransferase, len: 362 aa; similar to many, e.g. ILVE_BACSU putative branched-chain amino acid aminotransferase (362 aa), fasta scores; opt: 1047 z-score: 1401.5 E(): 0, 44.7% identity in 360 aa overlap. Contains PS00770 Aminotransferases class-IV signature*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and isopropylmalate dehydrogenases signature and Pfam match to entry pr00180 isodh, isocitrate and isopropylmalate dehydrogenases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note-"SCIC2.03, leuB, probable 3-isopropylmalate dehydrogenase, len: 347 aa; similar to e.g. LEU3_CORGL 3-isopropylmalate dehydrogenase (EC 1.1.1.85) (340 aa), fasta scores; opt: 1450 z-score: 1318.1 E(): 0, 68.0% identity in 338 aa overlap. Contains PS00470 Isocitrate
                                                                                                                                      /product="branched-chain
/protein_id="CAA19971.1"
/db_xref="GI:3355671"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LRPSKLLPGVATPLAGOPEIDFVVVREGTEGPYTGNGGTIRKGTEHEVATEVSVNTAY
GVERVVRDAFARAQARPRKKLTLVHKNNVLTFAGHLWTNIFNKVAAEYPEVTTDYLHV
DAATIFLVTDPARFDVIVTDNLFGDIITDLAAAVSGGIGVAASGNINPSGDFPSMFEP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="PS00470 Isocitrate dehydrogenases signature"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isopropylmalate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /translation="msrslnlavipgdgigqevvaeglkvlsavlpqdvkletkeede
Garryhatgetltdadldalkahdaillgaigdpsvpsgvlergfilklrfafdhhvn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="3-isopropylmalate
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/db_xref="GI:3355670"
                                                                                                               'db_xref="SPTREMBL:086505"
                                                                                                                                                                                                    transl_table=11/
                                                                                                                                                                                                                      codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note="
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene-"leuB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      note="Pfam match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="leuB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /product="hypothetical protein
/protein_id="CAA19969.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="SC1C2.02"
1537. .1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="PS00470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HGSAPDIAGQGKADPTATVLSVALLLRHLGYEDEAARIEDAVSADLGERGDLPARST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'transl_table=11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             translation="MAETTVRRRVRHLSRTSDSDRKNAAAALQRSLDRRDNGGATGH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      db_xref="SPTREMBL:086503"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'transl_table=11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               codon_start=]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            codon_start-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note-"SC1C2.02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'note="possible RBS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            db_xref="GI:3355669"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      xref-"SPTREMBL:086504"
                                                                                                                                                                                                                                                                                                                                                                                                                                      ="possible RBS upstream of ilvE"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ch to entry PF00180 isodh, Isocitrate and dehydrogenases, score 356.60, E-value
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   questionable
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                                                                                                                                                                            amino acid aminotransferase"
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AUTHORS
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ACCESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
MEDLINE
                                                                                                                                                                                                TITLE
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                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
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Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41415 CGCGCGGGCCAGGGCTTCAAGGACCTGGTGAGCG 41448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        256 caggccgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggc 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tccgctggctccctgctgaagaaggccgtcaccg 469
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACCGGGTCTCGGTCACCGGCTTCGGTTCCTTCGAGAAGGTCGACCGCCCGGCCCGTTAC 41354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gaaggcctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcacc 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCCGCAACCCGCAGACGGGCGAGCGGGTTCGGGTCAAGAAGACCTCCGTGCCGCGCTTC 41414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Caulopacter.

( bases 1 to 11684)

1 (bases 1 to 11684)

Nierman, W.C., Feldblyum, T.V., Laub, M.T., Paulsen, I.T., Nelson, K.E., Rierman, W.C., Feldblyum, T.V., Alley, M.R.K., Ohta, N., Maddock, J.R., Eisen, J., Heidelberg, J.F., Alley, M.R.K., Ohta, C., Phadke, N.D., Elv, B., Nelson, W.C., Newton, A., Stephens, C., Phadke, N.D., Ely, B., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Ely, B., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Haft, D.H., Kolonay, J.F., Smit, J., Craven, M., Khouri, H., Shetty, J., Berry, K., Utterback, T., Tran, K., Wolf, A., Vamathevan, J., Frmolaeva, M., White, O., Salzberg, S.L., Venter, J.C., Shapiro, L. and
                                                                                                                                                                                                                                                               2 (bases 1 to 11684)

Nierman, W.C., Feldblyum, T.V., Paulsen, I.T., Nelson, K.E., Eisen, J., Heidelberg, J.F., Alley, M.R.K., Ohta, N., Maddock, J.R., Potocka, I., Nelson, W.C., Newton, A., Stephens, C., Phadke, N.D., Ely, B., Laub, M.T., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Laub, M.T., DeBoy, R.T., Dodson, R.J., Durkin, A.S., Gwinn, M.L., Haft, D.H., Kolonay, J.F., Smit, J., Craven, M., Khouri, H., Shetty, J., Berry, K., Utterback, T., Tran, K., Wolf, A., Vamathevan, J., Ermolaeva, M., White, O., Salzberg, S.L., Shapiro, L., Venter, J.C. and
                                                                                                                                      Submitted (31-JAN-2001) The Institute for Genomic Research, Medical Center Dr. Rockville, MD 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Complete genome sequence of Caulobacter crescentus Proc. Natl. Acad. Sci. U.S.A. 98 (7), 4136-4141 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Caulobacter crescentus
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AE005903 AE005673
AE005903.1 GI:13423852
                                                                                                                                                                                                             Direct Submission
                                                                                                                                                                                                                                      Fraser, C.M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bacteria; Proteobacteria; alpha subdivision; Caulobacter group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
/organism="Caulobacter crescentus"
/db_xref="taxon:69394"
                                                                                                   Location/Qualifiers
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/gene="SC1C2.05c"
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complemen+//^~.
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/note="PS00770 Aminotransferases class-IV signature"
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57.0%;
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Pred. No. 1
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1.2e-05;
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229 of 359 of the complete
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAR-2001
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gene

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/protein_id-"AAK24301.1"
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AEAGLYADRVSINIELPRDDSLKALAPEKDPTDIKRAMGRMRLAIDDHAEPGRKARRR
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/gene="CC2329"
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AIAEGGWLGVAMPENVGGAGLGLTEAAVMMQSVAQSGAGFSGASAIHLNIFGPMPLVK
FGSDEQRNRLLPRIISGEDKWGFAVTEPNSGLDTSSLETRAEKVEGGYRLNGRKJWTT
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PF00441"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /db_xref="G1:13423856"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PDGLPLVGWSRTPGVMLAVGARRNGWLFAPLVADMVAAYLTGDNLGPDAAAMDARRFE
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ELADGGEEPFDTLILATGPGLRQGETTPETRWLSPIKGQILRLAACDDDGAPVVRGEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /translation="MKLRSGARIAVAGAGALGSAVALRLAQRGFRVTVFDPSPGDANA
SSVAAGMLAPVSEALFDPASRNHLDIMKRARDLWPDFARVLGLGLERDGVRIEGSDAW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product="D-amino acid oxidase family protein"
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/db_xref="GI:13423854"
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/gene="CC2329"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        dlfypaqdlygeegkgfqyllhgliperylfayeatglgraalakattyanertyfgr
pigonogyahplakswaeleaanllafkaaslydogkecgaeanaakylgaeagfhac
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/protein_id="AAK24299.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="DNA-binding protein HU"
/protein_id="AAK24302.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transl_table=11
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                                                                                                                                                                                                                                                                                                 'note="identified
                                                                                                                                                                                                                                                                                                                                  'gene="CC2332"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    codon_start-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'gene="CC2330"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="GI:13423853"
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/gene="CC2334"
6557. .7441
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/gene="tRNA-His-1"
                                                                                                                                                                                                                                                                                                                                                                            /translation="MAAKLSGGGGDRENVEQNSEINVTPFVDVMLVLLIIFMVAAPLA
SYSVEVILPPAVAKSSPPFSKRVYVSIKQSGQLYLGDNETSIDELGYDITKNMGRRDP
SKBRIFIRADEKVRYGAFMEVMNTLQDNGFYSVALVGRDDSQ"
complement(7805...8713)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GLGLHPEQARQADSRIAEAHVRRRFGNHRAAFQSALSRHGARDRRATADFHPLSTVRI
VPGHVFTRGLTGPVGTRDDRRTSRRVRRNRRRGRDHRRSRLFHPLFNGRDRQRRRRRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GPAGQIFDRALAEVSVRREQTYVTNAVKHFKHELNGKRRLHKTPTQGEVSACRWWLDA
ERRLVRPTVIVMLGATAAFGVMGRPTPVRETRGRPLPLPDGVQGLVTFHPSYLLRLPD
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RARDMAKAVSRAAHKMKAFVRFRRVEDAAKETYAAWFEPAHRVTEATAPFFARRFSNM
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RDDLKAVLSPAVQLSLF"
                                                                                                                               /product="MotA/TolQ/ExbB
/protein_id="AAK24307.1"
/db_xref="GI:13423861"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="hypothetical
/protein_id="AAK24305...
/db_xref="GI:13423859"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement(6418.
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/protein_id="AAK24304.1"
LFGTVYGIMTSF IGIANTNTTNLAVVAPGIAEALLATGIGLFAAIPAVIFYNYFQTRI
                         QEVELSRQAGLAVAGEHRDSTLSRATYAINAVQSSLAKRLSGGMVFLASVGSGGPFIG
                                                     FSWVLLLTKIFEFAALNKQSDKFLEAFRGARSIADIARISSSEEFEGNPMADMAAAAS
                                                                            DAAAAPAADAAAAAPAPEAAPAEEAAAPAAHSLTPTGMEMQAGVVVKVVMIGLVLASV
                                                                                                                                                                                                                                                                       /note="identified by match
                                                                                                                                                                                                                                                                                             /gene="CC2336"
                                                                                                                                                                                                                                                                                                                            complement(7805. .8713)
                                                                                                                                                                                                                                                                                                                                                   /gene="CC2336"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'product="ExbD/TolR family protein"
'protein_id="AAK24306.1"
'db_xref="GI:13423860"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note-"similar to SP:005606 GB:X70139 PID:49194; identified by sequence similarity; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement(7365. .7799)
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/db_xref="GI:13423858"
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                                                                                                           translation-"MLDIKRKTPFIALVGAMALMASAPAFAQDAAAPAAATAEAQPAT/
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JOURNAL
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                                                                                                                                                                                                                                                         AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTCGATCTCCGACGCCGCGGGGAAGGCGAGGAAGTCTCGATCCCCGGCTTCGGCAAGT 3359
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136; Conserv
Submitted (16-MAY-2000) Department of Medicine and Genetics, University of Washington Genome Center, University Of Washington, Box 352145, Seattle, WA 98195, USA
                                                                                                                                                                                                                                                                                                                       Stover, C.K., Pham, X.Q., Erwin, A.L., Mizoguchi, S.D., Warrener, P., Hickey, M.J., Brinkman, F.S., Hufnagle, W.O., Kowalik, D.J., Lagrou, M., Garber, R.L., Goltry, L., Tolentino, E., Westbrock-Wadman, S., Yuan, Y., Brody, L.L., Coulter, S.N., Folger, K.R., Kas, A., Larbig, K., Lim, R., Smith, K., Spencer, D., Wong, G.K., Wu, Z. and Paulsen, I.T. Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen
Nature 406 (6799), 959-964 (2000)
                                                                                                Stover, C.K., Pham, X. Q.T., Erwin, A.L., Mizoguchi, S.D., Warrener, P., Hickey, M.J., Brinkman, F.S.L., Hufnagle, W.O., Kowalik, D.J., Lagrou, M., Garber, R.L., Goltry, L., Tolentino, E., Westbrook-Wadman, S., Yuan, Y., Brody, L.L., Coulter, S.N., Folger, K.R., Kas, A., Larbig, K., Lim, R.M., Smith, K.A., Spencer, D.H., Wong, G.K.-S., Wu, Z., Paulsen, I.T., Reizer, J., Saier, M.H., Hancock, R.E.W., Lory, S. and Olson, M.V.
                                                                                 Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pseudomonas aeruginosa
Bacteria; Proteobacteria; gamma subdivision; Pseudomonadaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AE004606
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pseudomonas.
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Pred. No. 1.
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Mismatches 116;
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1. .10851
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'product="tRNA-Asp"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'gene="hupB"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           codon_start=1
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8406 AACAAGTCGGAACTGATCGATGCAATTGCCGCATCTGCTGATATCCCGAAAGCTGTTGCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ggctccctgctgaagaaggccgtcaccgagtgaccttct 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACCCGCAAACTGGCAAGCCGATCAAGATCGCCGCTGCCAAGATCCCCGGGCTTCAAAGCC 8645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aacccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgct 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCGTGCTGGTTTCGGCACCTTCGCTGTCAAAGAGCGCGCTGCTCGCACCGGTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgccaccggccgc 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTAAAGCCCTGAAGGATGCTGTCAACTAAGCGTCTTTT 8684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCGCGCACTGGACGCAGTGATCGAGTCCGTCACTGGCGCCCCTGAAGGCTGGTGACTCC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vibrio cholerae
Vibrio cholerae
                                                                                                                                                                                                                                        Submitted (14-JUN-2000) The Institute for Genomic Medical Center Dr. Rockville, MD 20850, USA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                               Ermolaeva,M.D., Vamathevan,J., Bass,S., Qin,H., Dragoi,I., Sellers,P., McDonald,L., Utterback,T., Fleishmann,R.D., Nierman,W.C., White,O., Salzberg,S.L., Shith,H.O., Colwell,R.R., Mekalanos,J.J., Venter,J.C. and Fraser,C.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Heidelberg, J.F., Eisen, J.A., Nelson, W.C., Clayton, R.A., Gwinn, M.L., Dodson, R.J., Haft, D.H., Hickey, E.K., Peterson, J.D., Umayam, L.A., Gill, S.R., Nelson, K.E., Read, T.D., Tettelin, H., Richardson, D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Heidelberg,J.F., Elsen,J.A., Nectorson,J.D., Umayam,L., Dodson,R.J., Haft,D.H., Hickey,E.K., Peterson,J.D., Umayam,L., Gill,S.R., Nelson,K.E., Read,T.D., Tettelin,H., Richardson,D., Gill,S.R., Nelson,K.E., Read,T.D., Tettelin,H., Richardson,D., Sandahevan,J., Bass,S., Qin,H., Dragoi,I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vibrio cholerae chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nature 406 (6795), 477-483 (2000) 20406833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cholerae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA sequence of both chromosomes of the cholera pathogen Vibrio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sellers, P., McDonald, L., Utterback, T., Fleishmann, R.D., Nierman, W.C. and White, O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Heidelberg, J.F., Eisen, J.A., Nelson, W.C., Clayton, R.A., Gwinn, M.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteria;
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AE004115.1 GI:96
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/note="biotype: El Tor" complement(162. .1400)
                                                                                                                                                   /organism="Vibrio cholerae"
/strain="N16961"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Proteobacteria; gamma subdivision; Vibrionaceae;
                                                              /chromosome="I"
                                                                                           /db_xref="taxon:666"
                                                                                                                       serotype="01"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:9654674
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Pred. No. 4.6e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A BCT 31-JUL-2000
I, section 23 of 251 of the complete
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                                                                                                                                                                                                                                                                                                       Research, 9712
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                                                                        /gene="VC0269"
/note="similar to SP:P25081 GB:X57117 PID:48820;
/note="similar to Sp:P25081 GB:X57117 PID:48820;
                                                                                                                                                                       /gene="VC0269"
3974 .5173
                                                                                                                                                                                                                                                                      /translation="mfigasffpygypyhfrclfpddrefytmlqnplqlrlekfepwg
Qiffmaclcermypnyamfcebtdfaeariyrdildsywblmyynnakynyfbhglekl
Eblifptsdafdlyanyfbaldacblafulhdfllaebmikvsqisydtyadleb
aqtgeaitndnqkeneaycaewdvqwaifrplreaybrdidlikdlrkelreegysni
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /gene="VC0268"
2943. .3611
                                                                                                                                                                                                                                                                                                                                                                        /product="conserved hypothetical protein"
/protein_id="AAF93443.1"
/db_xref="GI:9654678"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NVGRGKTLVEQGLPDLIAAGHIRHAFLDVFIKEPLAQDHPFWDNPAITITPHIAAVSF
PEQVVDIFADNYQRWCDNLPLRNQIDFEKGY"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /translation="mnnfholyIltybedehyrbolierqlegialtedrakatillaa
ppmaarrldefprlomlhsatagvdtlmdpkleknylltnvkgifghllaeynmgai
QyqrdfrlyqtqqaerlwqpryssilanqtlyIlgygsgishlahvakqbglrvygu
Rygipakeghfdatyhiselpaalmradllvntlpntpategilnqenlrhchqallf
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /translation="MLESLITEIROCTVCEPHILPLGANPVIRAHPAAKILIIGOAPGT
KVHQTSIPWNDASGERLRQWIGLDREAFYCEENIAIMEMGLCYGKGRGSGDLPPRKEC
APLMHAKVLEQLPNRQLTLLIGQYAQHYYLSDKPSTLTETVQQWQRWAPSVLPLPHPS
PRNTLWLKNHPWFEQDIVPYLRQRVKQVLT"
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YLRTHPNIHQDMTLMVRQLAPTHDGISLEVYCFTSTTVWVEYERIQSDIFDHIYAVLP
EFDLRVSQAPTGNDFRALRG"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /product="D-isomer specific 2-hydroxyacid dehydrogenase family protein"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              complement(2027. .2950)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               complement(2027. .2950)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TSLWIVVFGMLATYSVLNVLELLISRTQVGKNLPTRGILQSIKLIVFIIAALFETSIL
IGKSPVILLSGLGAWTAVFMLVFKDPILGLVAGVQLSANKMLSVGDWLEMPKYGADGS
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/product="mannose-6-phosphate
/protein_id="AAF93444.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /product="conserved hypothetical protein"
/protein_id="AAF93441.1"
/db_xref="GI:9654676"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       complement(1455. .2027)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VIDISLTTVKVQNWDKTITTIPSYALISDSFKNWKGMQESGGRRIKRSILIDATSVHF
                                              transl_table=11
                                                                                                                                                                                                                                                                                                                                                                                                                                                   transl_table=11/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note-"identified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="VC0268"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /protein_id="AAF93442.1"
/db_xref="GI:9654677"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    codon_start=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="similar to GB:Z11929 SP:P43169 PID:46871;
dentified by sequence similarity; putative"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /gene="VC0267"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /gene="VC0266"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /gene="VC0266"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /translation="MLETLTLWLQKFDIEIERVIQLAEALGLIAAISIAIHLVLHRGV
LLWLKRHTHHEQSVWRNALFKEHLFSRVALLIQGVVIAVQTQLWLSPNTFAYDVLHTL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="conserved hypothetical protein"
/protein_id="AAF93440.1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="identified by Glimmer2; putative"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           transl_table=11/
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'note="identified by Glimmer2; putative"
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7897. .8169
                                                                                                                                                                                                                                                                                                                /gene="VC0273"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /gene="VC0272"
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                                              'gene="VC0274"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         transl_table=11/
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/translation="mntaipapffimhnviQsyawgsidsinqlfdipnpkgepqaev WMGTHPNGCSYVEFSGEKIKLSTLIEQKKTDFLSIQTVEQFGELPYLFKILAANQALS IQVHPSKAEAEEGFARENAQGILINATNRNYKDPHKPELVYALTNYQAMNGFRPLSD AKQPIFALIEELATQYPNDIGLFAPLMLHVLTLQPGEAMFLDARTPHAYLKGTALEIM ANSDNVLRAGLTPKHIDVVELAKCTLFKEKSEATLLLTPIQQGDMLSFPVPVADFKFA IFPRPQQANITVSSAEILLPIDCDATLVSPCGTVLTVHKGQSVFIPAYTEKYCLSAAG | ISLFSALAIDEIASLLSHLKRNQNETGLEHFFTKLLSLCGEKKRRVLEQLLSYARSH

/note="similar to Sp:P23917 GB:X76979 PID:145329
PID:581151 GB:U00096; identified by sequence similarity; /product="ROK family protein" /protein_id="AAF93445.1" 'db_xref="GI:9654680"

/translation="MQQDVSREHTINNGSSMADHDEHPIEQKEFYMLIGLDIGGTKIE ICVLDKGGSMLYRGRIATEDKYSGFVDCVCSLIVDAEQATQFVDSIGIGLEGFAVSFVT GLIKNANCTFLUGGDLSSDLQYRLGREFYKLANDBANCFALSEAIDGAGKESMVVFGALI GTGCGGSIVVNRQVLVGPNAIGEWKRYKQQEFEAIHCYTGLIDHMARSFAGLVNVLDPDII SGFQDSYQALTGECITASEIMKRYKQQEFEAIHCYTGLIDHMARSFAGLVNVLDPDII VLGGGLSNIDELYRDLPTATARHVFSDSAQVHFAKAVFGDSSGIRGAAWL"

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NRLAGLKADIDRPLASILTLNTIAHTIGAATAGAQAAVVFGSQMLGLESAVLTLGILV
LSITYPKTIGATYWRELAPQASLVLRWMVWALTPFVWFSEQITKRLARKVEAPKLRDE KAFDQMMQKRLQLSVVVDEYGSVQGLLTLEDIFEHLLGEEIIDEADRTTDMQQLATER HRDTPFSRPLIYSEEKDNIVGFVHRLELFKEQQNGQGNLLLGDVMRPIHVVLNTLSLP ISAMAMLANENGEFAEGESKMLNNLLAIQNVPVTQVMTPRPVLFRVSADLTIDEFIEQ

/product="hypothetical protein"
/protein_id="AAF93447.1" translation="MVLKCTFELFSSHNLRGKGRKAQGEYEEKSLRLKEPKVLFSVTK" 'db_xref="GI:9654682" þу Glimmer2; putative*

/note="similar to Sp:P28080 PID:141878; identified by sequence similarity; putative" /translation="MNKTQLIDFIAEKADLTKVQAKAALEATLGAVEGALKDGDQVQL IGFGTFKVNHRSARTGRNPKTGEEIKIAAANVPAFVAGKALKDAIK" /product="DNA-binding protein
/protein_id="AAF93448.1" 'db_xref-"GI:9654683" HU

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REFERENCE
AUTHORS
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VERSION
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AF167159
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Best Local
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                                                                                                                                                                                                                                                                                                                                      MEDLINE
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                                                                                        gene
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8020 GTACAACTGATTGGTTTTGGTACATTCAAAGTTAATCATCGTTCTGCTCGTACTGGCCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7960 AAAGCAGCTCTTGAAGCGACTCTGGGTGCGGTTGAAGGTGCTCTGAAAGACGGCGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7900 AACAAGACCCAATTGATCGACTTTATCGCAGAGAAAGCGGACCTGACTAAAGTGCAAGCG 7959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          262 gaggotgotgttaacgcottocaggatgtgttcgtcgaggotatgaagtccggcgaaggc 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccgc 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ggctccctgctgaagaaggccgtcaccgagtgaccttctgct 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATCCAAAGACCGGTGAAGAGATCAAAATTGCGGCAGCTAACGTTCCTGCATTCGTAGCA 8139
                                                                                                                                                                                                                                                                                                                                                                                                  Summers, M.L., Botero, L.M., Busse, S.C. and McDermott, T.R. The ++Sinorhizobium meliloti lon protease is involved in regulating exopolysaccharide synthesis and is required for nodulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sinorhizobium meliloti
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (hupB) genes, complete
AF167159
AF167159.1 GI:6175840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sinorhizobium meliloti Lon protease (lon) and histone-like (hupB) genes, complete cds.
                                                                                                                                                                                                                     Submitted (08-JUL-1999) Land Resources and Environmental Sciences, Montana State University, 334 Leon Johnson Hall, Bozeman, MT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sinorhizobium meliloti.
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                                                                                                                                                                                                                                                                     Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rhizobiaceae; Sinorhizobium.
                                                                                                                                                                                                                                                                                        Summers, M.L.
                                                                                                                                                                                                                                                                                                                                      20225855
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NQFTGGKTIGDATSFYMYTESFQKPSSASDYVTSGDYGSYQTSTMEEGQVREIRREG
EHLDGKKLVPFRVHIRFSKEGEAVYQQYRLGGKVLPMNEEQLAHYVLQAKAVAEATKE
QDKQGLELIQGYWNGKFFETCGGVEYQRVEFNQSLPSFVFNRLASIESYVAFLGKIRN
GKVHIDELLLLDDAGHDCVKEFELLD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      complement(9004. .10293)
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/protein_id="AAF93449.1"
/db_xref="GI:9654684"
                                                                                                          organism="Sinorhizobium/db_xref="taxon:382"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="VC0275"
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codon_start=1
                                                                                                                                                                                ocation/Qualifiers
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                                                                Lon.
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                                                                                                                                                                                                                                                                                                                                                           2551-2558 (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               by Glimmer2; putative"
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GGCAAGGCCTCAAGGACGCCGTCAAC
                         ggctccctgctgaagaaggccgtcacc
                                                                                   AACCCGTCGACGGGGAAGTTGACATTCCGGCACGCAACGTGCCGAAGTTCACGGCC 3234
                                                                                                               ATCCGCCTCGTTGGCTTCGGCAATTTCTCCGTATCGCGCCGCGAGGCTAGCAAGGGCCGC
                                                                                                                                                                                                                      ctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccgc
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2992. .3264
/gene-"hupB"
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IERYTPRDDFYEAMAHALPEPDEDPVEIEALSRSVVSEFESYVKLNKKISPEVVGVAS
QIEDYSKLADTVASHLSIKIVEKQEMLETTSVKMRLEKALGFMEGEISVLQVEKRIRS
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TKKVEVSAENINDYLGVPRFRHGEAERDDQVGVVTGLAWTEVGGELLTIEGVMMPGKG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EIRGHRRTYIGSMPGKVVQSMKKAKKSNPLFLLDEIDKMGQDFRGDPSSALLEVLDPE
QNSTFMDHYLEVEYDLSNVMFITTANTLNIPPPLMDRMEVFRIAGYTEEEKLEIAKRH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /product="Lon protease"
/protein_1d="AAF05300.1"
/db_xref="G1:6175841"
/translation="MTNKTSPATESATYPVLPLRDIVVFPHMIVPLFVGREKSIRALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EAGTSIAH'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENAKDIADIPDNVKNSFEIIPVSRMGEVIAHALLRLPEPIEWDPASQPAALPSVDSQD
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/transl_table=11
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                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 63.8; DB 1;
Pred. No. 8e-05;
0; Mismatches 127;
3261
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 200000000
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: /SIDSB/gcgdata/geneseq/yeneseqn/NA198B.DAT:*

1: /SIDSB/gcgdata/geneseq/yeneseqn/NA198B.DAT:*

1: /SIDSB/gcgdata/geneseq/geneseqn/NA1999.DAT:*

2: /SIDSB/gcgdata/geneseq/geneseqn/NA1991.DAT:*

2: /SIDSB/gcgdata/geneseq/geneseqn/NA1991.DAT:*

3: /SIDSB/gcgdata/geneseq/geneseqn/NA1991.DAT:*

4: /SIDSB/gcgdata/geneseq/geneseqn/NA1993.DAT:*

5: /SIDSB/gcgdata/geneseq/geneseqn/NA1994.DAT:*

5: /SIDSB/gcgdata/geneseq/geneseqn/NA1995.DAT:*

6: /SIDSB/gcgdata/geneseq/geneseqn/NA1996.DAT:*

8: /SIDSB/gcgdata/geneseq/geneseqn/NA1999.DAT:*

6: /SIDSB/gcgdata/geneseq/geneseqn/NA1999.DAT:*

6: /SIDSB/gcgdata/geneseq/geneseqn/NA1999.DAT:*

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7: /SIDSB/gcgdata/geneseq/geneseqn/NA2000.DAT:*
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Gapop 10.0 , Gapext 1.0
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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39.6 39.6	39.6	43.6	4.010	47.2	47.2 47.2	Score
6. 6	6 6 6 8	7.3	7.5	7.9	7.9 7.9	Query Match
	273 1026	16075 16079	62909	1437668	349980 349980	Query Match Length DB ID
15 15	21 21	8 20	22	2 2	21	DB
AAQ70417 AAQ70418	AAC79661 AAA88001	AAV99811 AAN70753	AAF28545	AAA81490	AAF21609 AAF21610	ID
Streptomyces chole Streptomyces chole	Virulence gene #68 Mycobacterium bovi	Gum gene cluster. Sequence of segmen	N. meningitidis pa Genomic fragment #	N. meningitidis B	Neisseria meningit	Description

			C	c		c	O	C	a	a	o													a					^	c	^		
45	44	4	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22		20	19	18	17				13	12
34.2	34.4	34.4	34.6	34.6	34.6	34.8	34.8	34.8	35	35	35	35	35	35	35.2	35.2	35.4	35.8	36.2	36.2	36.6	37	37.4	37.4	37.4	37.6	37.8	37.8	39	39	39	39.6	39.6
5.7	5.7	5.7	5. 8	5. 8	5.8	5.8	5.8	5.8	5.8	5. 8	5. 8	5. 8	5.8	5. 8	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.2	6.2	6.2	6.2	6.3	6.3	6.3	6.5	6. 5	6.5	6.6	6.6
471	1525	1524	10732	2001	624	8438	2721	2721	17612	17612	17612	3946	1950	1950	47981	683	1822	2025	375	300	77536	2943	42235	1017	969	858	276	276	1326	1326	1326	1638	1638
21	10	12	21	22	17	15	12	12	22	21	19	18	21	19	22	21	11	20	20	22	21	17	20	20	20	20	22	22	22	22	22	22	17
AAF15020	AAN91207	AAQ10499	AAA10594	AAF60958	AAT06312	AAQ73500	AAQ10543	AAQ10212	AAF30870	AAA13905	AAV23494	AAT93610	AAA13897	AAV23479	AAF30757	AAF13147	AAQ06095	AAX98060	AAX98061	AAH90842	AAA14651	AAT16480	AAX98035	AAX98058	AAX98059	AAZ11393	AAH90729	AAH90714	AAH49591	AAH48225	AAH44356	AAH27164	AAT49320
Trichoderma reesei	Beta-ketothiolase	-ketothiolas	Gene encoding a su	KT2	Thaumatin II synth	ncodi	BamHI J-I fraqment		Pseudomonas alcali	Pseudomonas alcali	Pseudomonas Xpc, O	Mycobacterium tube	Pseudomonas alcali	Pseudomonas XcpO s	Micromonospora meg	Aspergillus oryzae	Sequence encoding	Nucleotide sequenc	Nucleotide sequenc	2CFE 33 coding seg	Nucleotide sequenc	SA8 virus qB qlyco	Nucleotide sequenc	Nucleotide sequenc		vaccae ant	ω	4		Heart muscle cell	Human GATA4 nucleo	Streptomyces prequ	Cholesterol oxidas

ALIGNMENTS

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WPI; 2000-647603/62.	M, Grandi G;	C, Mora M, Ratti G, Scarselli M, Scarlato V.	Pizza M, Hickey E, Peterson J, Tettelin H, Venter JC, Masignani V:		_	(CHIR) CHIRON CORP.		20	08-OCT-1999; 99WO-US23573.	30-APR-1999; 99US-0132068.		08-MAR-2000; 2000WO-US05928.	OU NOT ACCO.	09-VOV-2000		WO200066791-A1,		Neisseria meningitidis.		ds.	diagnosis; antique; detection; infection; gene therapy; antique; detection; infection; gene therapy; antique; antique; and the same therapy; and the same the s	Neisseria meningitidis; Neisseria gonorrheae: immunogenic: vaccine:		Neisseria meningitidis B nucleotide sequence SEO ID NO:110	TO THE STORY (TITION CHILLY)	13-WND-2001 (#4-o+ ost)		AAF21609;	to the second se	ID AAF21609 standard: DNA: 349980 RD	

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  335084 GTTACTTTGGTCGGTTTCGGTACTTTCTACGTGGGCGAACGTGCGGAACGCCAAGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          335144 CAAAAAGCTTTGGATGCCACTACCAATGCAGTAACCACCGCCCTGAAACAAGGCGACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  335204 AACAAGTCTGAATTGATCGAAGCGATTGCTCAAGAAGCCGACATTTCCAAAGCCGCCGCA 335145
                                                                                     Neisseria meningitidis; Neisseria gonorrheae; immunogenic; vaccine; diagnosis; antigen; detection; infection; gene therapy; antibacteri
                                                                                                                                                                                                        13-MAR-2001
                                                                                                                                                                                                                                                     AAF21610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 349980 BP; 81351 A; 86755 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes the full length genome of Neisseria meningitidis B (NMB). The sequences in AAF21544 and AAF21607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Neisseria meningitidis B full length genome sequence and open reading frames are used to detect, treat and prevent Neisserial infections -
                     Neisseria meningitidis
                                                                                                                                                          Neisseria meningitidis B nucleotide sequence SEQ ID NO:111.
                                                                                                                                                                                                                                                                                                AAF21610 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          442
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                GGCAAAGCTTTGAAAGACGC 334945
                                                                                                                                                                                                                                                                                                                                                                                                                                       ggctccctgctgaagaaggc 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aacccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgct 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ctgaagctcaccggcctgttctccgctgagcgcgtcaaagcgcccggctcgcaccggccgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACCCCAAAACCGGCGAGCCTCTGACCATTGCCGCCGCCAAAACGCCTAAATTCCGCGCC 334965
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                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                DNA;
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Pred. No. 0.0052;
                                                                                     infection; gene therapy; antibacterial;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133;
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                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 127
                                                                                                                                                                                                                        35204 AACAAGTCTGAATTGATCGAAGCGATTGCTCAAGAAGCCGACATTTCCAAAGCCGCCGCA 35145
                                                                                                                                                35144 CAAAAAGCTTTGGATGCCACTACCAATGCAGTAACCACCGCCCTGAAACAAGGCGACACC 35085
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Galeotti C,
                                                                        35084 GTTACTTTGGTCGGTTTCGGTACTTTCTACGTGGGCGAACGTGCGGAACGCCAAGGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                              more effective in vaccines than the outer membrane proteins used.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neisseria meningitidis B full length frames are used to detect, treat and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI;
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08-OCT-1999;
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                                                                                                             322
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                                                                                                                                                                                                                                         202 aacaagtctgacctcgtttcgaagatcgcccagaagtccaagctcgaccaaggctcaggcc 261
                                                                                                                                                                                                                                                                                                y Match 7.9%;
Local Similarity 48.8%;
hes 127; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present invention describes the full length genome seria meningitidis B (NMB). The sequences in AAF21:
                                                                                               ctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccgc 381
                                                                                                                                                                       gaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggc 321
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AACCCCAAAACCGGCGAGCCTCTGACCATTGCCGCCGCCAAAACGCCTAAATTCCGCGCC 34965
                             aacccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgct 441
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C, Mora M,
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99WO-US23573.
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                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                Score 47.2; DB 21;
Pred. No. 0.0052;
0; Mismatches 133;
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, Scarselli M,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genome sequence and open reading prevent Neisserial infections -
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                                                                                                                                                                                                                                                                                                                                                                                           84066 T; 0 other;
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Scarlato V,
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Rappuoli R;
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C AAAB1452 and AAAB1374 TELEGRALE TON PLAIMELS USED ALL PROPERTIES OF COMMENDED TO MELSSETIA MENINGITURES DNA SEQUENCES; and AAAB1322 to Sequences, which are all used in the exemplification of the present invention. The nucleic acid sequences, protein sequences, and antibodies invention. The nucleic acid sequences, protein sequences, and antibodies invention can be used in the manufacture of a composition can be used in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can be used as a medicament (or in the manufacture of a composition can will also facilitate production of biological probes, and/or against all pathogenic Neissariae. Identification of sequences composition of production of biological probes, and any accides have failed mainly due to antigen tolerance. Composition can be provided an opportunity to identify secreted or surface capposed proteins that may be presumed targets for the immune system and composition can be accided than a provision of a least more conserved than accident and provision of a least more conserved than accident and provision of a least more conserved than accident and cappositions.
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AAA81490/c
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Masignani V, Galeott
                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes methods of obtaining immunogenic proteins from Neisseria genomic sequences. AAA81453 to AAA82414 represent specifically claimed Neisseria meningitidis genomic DNA sequences; AAA81260 to AAA81303 and AAB25620 to AAB2563 represent Neisseria DNA sequences and their corresponding proteins; AAA81254 AAA81259 and AAA81304 to AAA81331 represent PCR primers used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Isolated nucleotide sequences of Neisseria meningitidis which can used in the diagnosis and treatment of N. meningitidis infection \epsilon other Neisserial infections, for example, N.gonorrhoea -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 7; Page 866-1272; 1760pp; English
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30-APR-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Meningococcus B; MenB; ds.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Neisseria meningitidis; Neisseria gonorrheae; genome; immunogenic;
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, Galeotti
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99US-0132068
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                                       regions.
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C, Mora
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Ratti G, Scarselli
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Best Local Similarity Matches 127; Conserv

Conservative

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Mismatches

133;

Indels Length

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Gaps

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used

in the manufacture

1437668;

48.8%;

Score 47.2; DB 21; Pred. No. 0.0097;

Query Match

Sequence 1437668 BP; 344338 A; 353206 C;

385074 G;

355045

T; 5 other

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RESULT
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ID AAA8
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        The present invention describes methods of obtaining immunogenic proteins from Neisseria genomic sequences. AAA81453 to AAA82414 represent specifically claimed Neisseria meningitidis genomic DNA sequences; AAA81260 to AAA81303 and AAB25620 to AAB25663 represent Neisseria DNA sequences and their corresponding proteins; AAA81254 to AAA81329 and AAA81321 represent PCR primers used in the isolation of Neisseria meningitidis DNA sequences; and AAA81332 to AAA81452 represent Neisseria meningitidis DNA sequences; and AAA81332 to AAA81452 represent Neisseria meningitidis MNA polynucleotide ORF sequences, which are all used in the exemplification of the present invention. The nucleic acid sequences, protein sequences, and antibodies against them, can be used in the manufacture of a composition. The
                                                                                                                                                                                                                      Claim 7; Page 1372-1375; 1760pp; English.
                                                                                                                                                                                                                                                        Isolated nucleotide sequences of Neisseria meningitidis which can be used in the diagnosis and treatment of N. meningitidis infection and other Neisserial infections, for example, N.gonorrhoea -
                                                                                                                                                                                                                                                                                                                                                             Frazer CM, Hickey
Masignani V, Galeo
Rappuoli R, Pizza
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30-APR-1999;
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, Galeotti
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C, Mora
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as a medicament (or
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Ratti G, Scarselli
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RESULT
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     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    particularly organism-specific probes. Attempts to make efficacious Meningococcus B vaccines have failed mainly due to antigen tolerance. Multivalent vaccines have also been tried but none have successfully overcome antigenic variability. The provision of further, complete sequences may provide an opportunity to identify secreted or surface exposed proteins that may be presumed targets for the immune system and which are not antigenically variable or at least more conserved than
Genomic library for identifying diagnostic and therapeutic compositions, and for identifying virulence factors, regula
                                                    WPI; 2001-041427/05
                                                                                                                                                     18-JUN-1999;
                                                                                                                                                                                                                                                                                     Moraxella catarrhalis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       be components of vaccines against Meningococcus B; against all serotypes; and/or against all pathogenic Neissariae. Identification of sequences from the bacterium will also facilitate production of biological probes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           medicament) for treating, preventing or diagnosing infection due to Neisserial bacteria. For example, some of the identified proteins could
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                                                                                                                    (INCY-) INCYTE GENOMICS INC
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48.5%;
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Pred. No. 0.0013;
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Best Local S
Matches 132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  53001 AATAAGTCTGAATTGGTAGATAGTATTGCACAAAGTGCTGGCCTAACCAAAGAGCAAGCT 52942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52881
                                                              12-JUN-1998;
12-JUN-1997;
11-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aerobic, gram-negative diplococcus, normally found among the bacterial flora of human upper airways. M. catarrhalls is known to cause acute, localised infections such as otitis media, sinusitis and bronchopulmonary infection and life-threatening, systemic diseases including endocarditis and meningitis.
                                                                                                                                                                                                                                                                                                                                Gum gene cluster.
                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV99811 standard; DNA; 16075 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 62909 BP; 18449 A; 13798 C; 12744 G; 17918 T; 0 other.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention relates to a Moraxella catarrhalis genomic libra comprising of a combination of 41 nucleic acid molecules (see Comprising of a combination of 41 nucleic acid molecules (see AAF28514-AAF2854). The library has a number of uses described in the specification e.g. is useful for aidentifying diagnostic and therapeut compositions. M. catarrhalis (Branhamella catarrhalis) is a large
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        elements and drug targets, comprises Moraxella catarrhalis nucleic
                                                                                                                                                                                                  WO9856942-A1
                                                                                                                                                                                                                                                                substrate; lactose; sucrose; starch; ss.
                                                                                                                                                                                                                                                                                Xantham gum; gum; exopolysaccharide; gum gene cluster;
recombination; Xanthomonas; Sphingomonas; sphingan S88
                                                                                                                                                                                                                                                                                                                                                                                                  AAV99811;
                                                                                                                                                                 17-DEC-1998.
                                                                                                                                                                                                                                 Xanthomonas campestris
                                                                                                                                                                                                                                                                                                                                                                 14-JUN-1999
             (SHIN-) SHINETSU BIO INC.
(SHIE ) SHINETSU CHEM CO LTD
                                                                                                                                12-JUN-1998;
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les 132; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aacaagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaggcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ggctccctgctgaagaaggccgtcaccgagtgacctt 478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATCCAAAACTGGCGAAGCAATCCAAATTGCAGCCAGCAAAGTACCTAGCTTTAAAGCA 52762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTCGTATTGGTTTTGGTACTTTCAGCGTCAAAGAGCGTGCTGCTCGTATGGGCCGT
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                                                              98US-0096942.
97US-0049428.
98US-0096867.
                                                                                                                                  98WO-US12322
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Best Local Similarity
Matches 127; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xanthan gum is an exopolysaccharide produced by Xanthomonas species and encoded by the gum gene cluster. The gum gene cluster of Xanthomonas campestris can be inserted into a Sphingomonas species of bacterium. The gum gene cluster is inserted into the Sphingomonas S88 sps gene cluster which itself expresses an exopolysaccharide, sphingan S88. The new novel recombinant Sphingomonas strain can then produce xanthan gum from sugar substrates i.e. the cheese-making by produce whey lactose, sucrose or starch. These are substrates which the Xanthomonas campestris bacterium cannot utilise in its
                                                                                                                                                                                                                                                                                                                            Sequence of segment of Xanthomonas campestris DNA that contains gene cluster that directs Xanthan biosynthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       production of Xantham gum. Use of the Sphingomonas species also minimises the presence of contaminating cellulases in the growtl medium into which the xantham gum is secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Production of exopolysaccharide, e.g. xanthan gum by a Sphingomon species bacterium - containing the gumb-M genes of X. campestris, and using lactose as a C source
                            24-MAR-1987;
                                                                                          08-OCT-1987
                                                                                                                                                                                                                                                                       Thickening agent; oil recovery; drilling fluid; ds
                                                                                                                                                                                                                                                                                                                                                                                                                             20-MAY-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAN70753;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAN70753 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16075 BP;
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                                                                                                                                                   W08705938-A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cccggtcgcaatcccaagaccggtgaggaaattccgatctcggccaggacggtggtgacc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ggccgtcaggtgaagttgtcgggcttcggcaacttcgatctgcggcgcaagaaccaacgg 212
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                            87WO-US00604
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2698 A; 4644 C; 5264 G; 3469 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               139;
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RESULT
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Best Local Similarity 49.6%;
Matches 111; Conservative
                                                                                                                                09-APR-1999;
10-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Virulence gene; antibacterial; vaccine; bacterial infection; septicemia; bronchopneumonia; rhinitis; wound infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Virtually all of the segment of Xanthomonas campestris DNA that contains a gene cluster that directs Xanthan biosynthesis (AAN70753), codes for protein products. Each gene is designated by a letter (see Fig 11) and its protein product is designated by that letter preceded by "gp" (AAP70455-67).
                   Lowery DE,
                                                                                                                                                                                                                06-APR-2000;
                                                                                                                                                                                                                                                                      19-OCT-2000
                                                                                                                                                                                                                                                                                                                         WO200061724-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Virulence gene #68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC79661;
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24-MAR-1986;
                                                                          (PHAA ) PHARMACIA & UPJOHN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant DNA prodn. of xanthan gum or its variants transforming host cells with vector contg. DNA coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GETT-) GETTY SCI DEV CO.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373 accggccgcaacccgcgcgcactggcgagcagattgacattccggc 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193 atggcatacaacaagtctgacctcgtttcgaagatcgcccagaagtcccaacctgaccaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       33 atggcattgacgaaagcggagatggccgagcgtctgttcgacgaagtcggcctgaacaag
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ggccgtcaggtgaagttgtcgggcttcggcaacttcgatctgcggcgcaagaaccaacgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cgtgaggcgaaggaattcgtcgacgcgtttttcgatgtgctgcgcgatgcactggagcag 152
                   Fuller TE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Doherty DH,
                                                                                                                                                                                                                2000WO-US09218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                99US-0128689.
99US-0153453.
                                                                                                                                                                                                                                                                                                                                                                                  pleuropneumoniae
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86US-0842944.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        273
                      Kennedy MJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Betlach MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 43.2; DB 8;
Pred. No. 0.021;
0; Mismatches 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vanderslice
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3462 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      113;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              256
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ARESULT
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Attenuated Pasteurellaceae bacteria comprising mutations in virulence genes, useful as a live attenuated vaccine against bacterial infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 273 BP; 96 A; 52 C; 66 G; 59 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mycobacterium bovis BCG strain; mycobacterium DNA binding protein MDP1; slow growing acid-fast bacterium protein; immunogenicity; pathogenic acid-fast bacterium; diagnosis; tuberculosis; MAC; Mycobacterium avium intracellular complex; Hansen's disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA88001 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             bronchopneumonias, rhinitis and wound infections.
(SAKA ) OTSUKA PHARM CO LTD (YAMA/) YAMADA T.
                                                                                    29-JAN-1999;
                                                                                                                                         28-JAN-2000;
                                                                                                                                                                                                   03-AUG-2000
                                                                                                                                                                                                                                                           WO200044905-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mycobacterium bovis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacterium bovis BCG strain MDP1 encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64 aaagcggcattagaagcgactttaaatgcgatctctgaaagcctaaaaaatggcgacacc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-647422/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gttcagttaatcggcttcggtacttttaaagtaaacgagcgtaatgcacgtacgggtcgt 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              aacccgcgcactggcgagcagattgacattccggcttcctacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccgc 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gaggctgctgttmacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggc 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 aacccgcgtaccggcgaagaaatcaaaatcgcagcatctaaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pages 300-301; 322pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.8%; ilarity 48.9%; Conservative
                                                                                                                                               2000WO-JP00455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                       99JP-0022588.
                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
265..882
                                                                                                                                                                                                                                                                                                                /product-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1026
                                                                                                                                                                                                                                                                                                                "Mycobacterium DNA binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 40.6; DI
Pred. No. 0.02;
0; Mismatches
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).02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA SEQ ID NO:1.
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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 99; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence encodes the Mycobacterium bovis BCG strain mycobacterium DNA binding protein I (MDPI), which has immunogenicity against pathogenic acid-fast bacteria. The MDPI protein can be used diagnosis and treatment of diseases involving pathogenic acid-fast bacteria, such as tuberculosis, Mycobacterium avium intracellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   complex (MAC) and Hansen's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 1; Fig 2A; 62pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 such as tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yamada T,
                                                                                                                                                                                 Cholesterol oxidase; Streptomyces; enzyme; thermostability; diagnosis; endocrine disease; metabolism; ss.
                                                                                                                                                                                                                 Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MATS/) MATSUMOTO
                                                                                               05-JUL-1993;
                                                                                                                                        JP06169765-A
                                                                                                                                                              Streptomyces sp.
                                                                                                                                                                                                                                       01-MAR-1995
                                                                                                                                                                                                                                                            AAQ70417;
                                                                                                                                                                                                                                                                                AAQ70417 standard;
                     P-PSDB;
                                WPI; 1994-237584/29
                                                                                                                   21-JUN-1994
                                                                                                                                                                                                                                                                                                                                      448
                                                                                                                                                                                                                                                                                                                                                                              388
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                                                    (тоум ) тоуово кк.
                                                                                                                                                                                                                                                                                                                                                382 aacccgcgcactggcgag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mycobacterium DNA binding protein 1 immunogenic for pathogenic d-fast bacteria for diagnosis, treatment and prevention of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-543393/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                             aacaaagcagagctcattgacgtgctcacacagaaattgggctcggaccgtcggcaggcg 327
                                                                                                                                                                                                                                                                                                                                                                                           gaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggc 321
                                                                                                                                                                                                                                                                                                                                    aatccgcgtaccggcgag
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matsumoto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                 cholesterol oxidase.
                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP;
                                                                                               93JP-0165558
                                                                                                                                                              SA-COO
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                                                                                                                                                                                                                                                                                  DNA;
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                                                                                                                                                                                                                                                                                                                                       465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 39.6; DB Pred. No. 0.071;
                                                                                                                                                                                                                                                                                  ВP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ium bovis BCG
which has imm
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  useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 1026;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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Cholesterol oxidase with high thermostability

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        an index for the diagnosis of endocrine diseases and abnormal metabolism. The enzyme is obtained by adding manno acid residues to the N-terminus of cholesterol oxidase derived from Streptomyces sp. SA-COO, which shows the same activity as that of the naturally occuring enzyme, but has higher thermostability. Cholesterol oxidase DNA sequences derived from Streptomyces sp. are given in AAQ70417-18.
                                                                                                                                                                                                                                                                                                                                                                                                                                  1457
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1217
 Claim 8;
                        Cholesterol oxidase with high thermostability - diagnosis of endocrine diseases
                                                                                                                                                                                                                          Streptomyces
                                                                          WPI; 1994-237584/29
                                                                                                                         05-OCT-1992;
                                                                                                                                                  05-JUL-1993;
                                                                                                                                                                             21-JUN-1994
                                                                                                                                                                                                    JP06169765-A.
                                                                                                                                                                                                                                                     diagnosis; endocrine
                                                                                                                                                                                                                                                                 Cholesterol oxidase;
                                                                                                                                                                                                                                                                                         Streptomyces cholesterol oxidase
                                                                                                                                                                                                                                                                                                                  01-MAR-1995
                                                                                                                                                                                                                                                                                                                                           AAQ70418;
                                                                                                                                                                                                                                                                                                                                                                   AAQ70418 standard;
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                                                              P-PSDB; AAR60325
                                                                                                 (TOYM ) TOYOBO
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 7;
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                                                                                                                                                                                                                                                                                                                                                                                            11
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                                                                                                                                                                                                                                                                                                                                                                                                                                tctacgtgaccgac 1470
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tcaacgcagccaaggcgctgttcgaccggatcaacaaggcgaacggcacgatctaccggt 1336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acgacgccgcgacggaccgcgaagctcaactggacccgtgaccagaacgcccccgcgg
Page 11-13; 15pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Page 9-11; 15pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of endocrine diseases
                                                                                                                                                                                                                          sp.
                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                           92JP-0266130
                                                                                                                                                  93JP-0165558
                                                                                                                                                                                                                             SA-C00
                                                                                                                                                                                                                                                                                                                                                                   DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.6%;
                                                                                                                                                                                                                                                   Streptomyces; disease; metal
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Pred. No. 0.
                                                                                                                                                                                                                                                      metabolism;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                               enzyme; thermostability;
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                                    useful for
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Best Local
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                                Disclosure; Page 19-21; 23pp; Japanese
                                                                                                                WPI; 1996-479904/48
P-PSDB; AAW08930.
                                                                                                                                                                                                        07-MAR-1995;
                                                                                                                                                                                                                                                              JP08242860-A.
                                                                                                                                                                                                                                                                                     Streptomyces
                                                                                                                                                                                                                                                                                                            Cholesterol oxidase; mutation; thermal stability; substitution; ss.
                                                                                                                                                                                                                                                                                                                                      Cholesterol oxidase coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                     AAT49320 standard; DNA; 1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1340
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                                                                                                                                                                                07-MAR-1995;
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                                                                                                                                                      (TOYM ) TOYOBO KK.
                                                                                                                                                                                                                                    24-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oxidase DNA sequences derived from Streptomyces sp. are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ctggcgagcagattgacattccggcttcctacggcgttcgtatctccgctggctccctgc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     tctacgtgaccgac 1473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gcggctgcgtcctgggcaaggcgacgactacggccgcgtcgccggttacaagaacc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         acgacctcttcggcacccagctgaaggccttcgccgacgacttctgctaccacccgctcg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccgcaacccgcgca 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tcaacgcagccaaggcgctgttcgaccggatcaacaaggcgaacggcacgatctaccggt 1339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acgacgccgcgacggaccgcgcgaagctcaactggacccgtgaccagaacgccccccgcgg 1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120;
                                                                        cholesterol oxidase enzyme - having higher thermal \gamma than the parent enzyme, useful in cholesterol det
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                     sp.
                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B₽;
                                                                                                                                                                                95JP-0047339
                                                                                                                                                                                                          95JP-0047339
                                                                                                                                                                                                                                                                                        SA-COO
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Pred. No. 0
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cholesterol oxidases may be

This sequence encodes wild type cholesterol oxidase.

prepared by

mutation of

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RESULT 1
AAH27164
AAH
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Best Local Similarity
Matches 120; Conserv
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     This invention relates to a pregnenolone oxidase, pregnenolone in the presence of an enzyme to form
                                                                               Disclosure;
                                                                                                                                                                                                                                                                                                                             06-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                           06-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                         21-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JP2001069991-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pregnenolone oxidase; progesterone;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptomyces
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                                                                                                                                                                                                       P-PSDB; AAB97267.
                                                                                                                                                                                                                              WPI; 2001-297396/31.
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                                                                                                                          pregnenolone oxidase used for the reparation of progesterone -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
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nilarity 47.2%;
Conservative
                                                                          Page 12-14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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  the presence
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/product= "Pregnenolone oxidase"
/note= "No stop codon given"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   289 A;
                                                                     25pp; Japanese
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0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          hydrogen peroxide;
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which reacts progesterone
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RESULT 14
AAH44356/c
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Matches 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Differentiation; heart muscle cell; cytokine; tr
proliferation; surface antigen; heart disease; c
bone marrow; umbilical blood cell; heart muscle
myocardial infarction; ss.
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                         Cells capable of differentiating into cardiomyocytes and originating bone marrow or umbilical blood cells for study of cardiomyocyte differentiation and treatment of heart disease -
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                                                                                                                      WPI; 2001-425655/45.
P-PSDB; AAB99920.
                                                                                                                                                                                                                      Umezawa A,
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Pred. No. 0.08
0; Mismatches
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No. 0.087;
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                                                                                                                                                                                                                           Sakurada
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     degeneration;
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Disclosure; Page 100-102; 187pp; Japanese.

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ARESULT 15
AAH48225/C
ID AAH482
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 6.5
Best Local Similarity 56.4
Matches 92; Conservative
   WPI; 2001-425656/45
                                                                        Umezawa A,
Yamada Y;
                                                                                                                                                                                                                                       28-DEC-1999; 99JP-0372826.
28-FEB-2000; 2000WO-JP01148.
02-NOV-2000; 2000WO-JP07741.
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                                                                                                                                                                          (KYOW ) KYOWA HAKKO KOGYO KK
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                                                                                                     Hata J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
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56.4%;
                                                                                                     Fukuda K,
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Pred. No. 0.12;
0; Mismatches 70; Indels
                                                                                                     Ogawa S,
                                                                                                     Sakurada K,
                                                                                                     Gojo S;
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                                                                                            Query Match
Best Local
                                                                                                                                                                                                    The present invention provides cells originating in the human bone me or umbilical blood cells which are capable of differentiating into cardiomyocytes. These cells are useful in the treatment of diseases involving heart muscle degeneration, such as myocardial infarction, at the study of cardiomyocyte differentiation. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                                                                   Sequence 1326 BP; 215 A; 499 C; 414 G; 198 T; 0 other;
                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 106-108; 183pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                             Cells capable of differentiating into cardiomyocytes and originating bone marrow or umbilical blood cells for study of cardiomyocyte
                                                                                                                                                                                                                                                                                                                                                                               differentiation and treatment of heart disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAG64849
566 AGGACCGGGCTGTCGAAGGGGCCGGCGGAGGCGGCGGCGGCGCGCCCAGGACGCGCCC 507
                     235 aagtccaacctgaccaaggctcaggccgaggctgctgtttaacgccttccaggatgtgttc 294
                                                                              92;
                                                                                              Similarity
                                                                            Conservative
                                                                                          56.48;
                                                                          Score 39; DB 22; Length 1326;
Pred. No. 0.12;
0; Mismatches 70; Indels
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Search completed: December Job time: 4094 sec 20, 2001, 20:02:58

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gtcaagcgcccggctcgcacccggccgcaacccgcgcactggcg 397

GTACTGCTCGCGGCCGCCAGGCCCGCACCCGCCGCTCCGCCG 405

ACGTCGGCCATGTAAGCCGGGTAGGGGGCTGGAG-TAGGAGCCCGCGAAGCCGGCGCGCCCC gtcgaggctatgaagtccggcgaaggcctgaagctcaccggcctgttctccgctgagcgc 354

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Result
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Maximum DB seq length: 2000000000
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          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                                                                                                  Match
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600
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Listing first 45 summaries
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/cgn2_6/ptodata/2/ina/5B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/Backfiles1.seq:*
/cgn2_6/ptodata/2/ina/backfiles1.seq:*
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8438
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4 US-09-095-855-200

1 US-08-925-853-14

1 US-08-911-853-14

1 US-09-479-409-14

1 US-09-479-409-29

2 US-09-103-840A-2

4 US-09-103-840A-1

5 5215881-2

1 US-09-425-283-1

1 US-08-945-283-1

2 US-09-425-283-1

2 US-09-425-283-1

3 US-08-426-5998-3

5 5229279-1
  US-09-194-905-7
US-08-110-300A-8
US-08-86-642-8
PCT-US93-08041-8
US-08-110-300A-9
US-08-110-300A-9
US-08-191-794-1
US-08-997-080-191
US-08-997-362-191
US-08-997-362-191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   702406
                                                                                                                                                                          Sequence 14, Appl
Sequence 29, Appl
Sequence 29, Appl
Sequence 29, Appli
Sequence 2, Appli
Sequence 1, Appli
Patent No. 5215881
Sequence 1, Appli
Sequence 3, Appli
Sequence 3, Appli
Patent No. 5512669
                                                                                                                                                                                                                                                                                                    Sequence 1, App...
Sequence 200, App
Sequence 7, Appli
Sequence 14, Appl
Patent No. 5229279
Sequence 7, Appli
Sequence 8, Appli
Sequence 8, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 11, Appli
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Sequence 1, Appli
Sequence 200, App
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Sequence 3, Appli	Sequence 1, Appli	Sequence 7, Appli	Sequence 7, Appli	Sequence 7, Appli	Sequence 7, Appli	Sequence 13, Appl	13,	13,	13,	14,	Sequence 14, Appl	Sequence 14, Appl	14,	Sequence 1, Appli	Sequence 23, Appl	Sequence 1, Appli	pequence I, Appli

ALIGNMENTS

Qy 433 atctccgctggctccctgctgaagaa 458	Qy 373 accggccgcaacccggcactggcgagcagattgacattccggcttcctacggcgttcgt	Oy 313 ggcgaaggcctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgc	Qy 253 gctcaggccgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtcc	Qy 193 atggcatacaacaagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaag 	Query Match 7.3%; Score 43.6; DB 3; Best Local Similarity 47.7%; Pred. No. 0.0017; Matches 127; Conservative 0; Mismatches 139	PATENT NO. 6027925 GENERAL INFORMATION: APPLICANT: Pollock, Thomas J APPLICANT: Mikolajczak, Marcia APPLICANT: Mikolajczak, Marcia APPLICANT: Torne, Linda APPLICANT: Torne, Linda APPLICANT: Armentrout, Richard W ITILE OF INVENTION: Production of Xanthan Gum by Sphingomonas ITILE OF INVENTION: Production of Xanthan Gum by Sphingomonas ITILE OF INVENTION: Oarrying Genes from Xanthomonas Campestri FILE REFERENCE: seq list for appl filed from pro. appl CURRENT APPLICATION NUMBER: US/09/096,942 CURRENT FILING DATE: 1998-06-12 EARLIER APPLICATION NUMBER: 60/049,428 EARLIER FILING DATE: 1997-06-12 NUMBER OF SEQ ID NOS: 2 SOFTWARE: Patentin Ver. 2.0 SEQ ID NO 1 SEQ ID NO 1 SEQ ID NO 1 ORGANISM: Xanthomonas campestris PUBLICATION INFORMATION: US-09-096-942-1
	ttgacattccggcttcctacggcgttcgt 432 	ccgctgagcgcgtcaagcgcccggctcgc 372 acttcgatctgcggcgcaagaaccaacgg 212	aggatgtýttogtogaggctatgaagtoc 312 togatgtgctgoggatgcactggagcag 152	agatogoccagaagtocaacctgaccaag 252 	Score 43.6; DB 3; Length 16075; Pred. No. 0.0017; O; Mismatches 139; Indels O; Gaps	han Gum by Sphingomonas Bacteria m Xanthomonas Campestris d from pro. appl 942

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09-096-867-1

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US-09-095-855-200
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SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 1
LENGTH: 16075
TYPE: DNA
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Best Local Similarity 47.7%;
Matches 127; Conservative
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CURRENT FILING DATE: 1998-06-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Xanthomonas campestris PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER APPLICATION NUMBER: 60/049,428 EARLIER FILING DATE: 1997-06-12
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APPLICANT: Mikolajczak, Marcia
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APPLICANT: Thorne, Linda
APPLICANT: Armentrout, Richard
                                                                                                                                                                                                                                                                                                                          tent No. .6160093
                                                                                                                                            TITLE OF INVENTION: Compound TITLE OF INVENTION: Treatment TITLE OF INVENTION: TOTAL TRANSPORTENCES: 208
                                                                                                                                                                                                                   APPLICANT: Tan, Paul
APPLICANT: Visser, Elizabeth
APPLICANT: Skinner, Margot
APPLICANT: Prestidge, Ross
                                                                                                                                CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373 accggccgcaaccgcgcactggcgagcagattgacattccggcttcctacggcgttcgt 432
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                                                                                      STREET:
                                                                                                       ADDRESSEE:
98121
                                                          Seattle
                                          WA
                                                                                    Eaw Offices of Ann W. Speckman
2601 Elliott Avenue, Suite 4185
                       USA
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                                                                                                                                                                           Compounds and Methods for 
Treatment and Diagnosis of
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US-08-042-747A-7
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FILING DATE: 29-AUG-1996
APPLICATION NUMBER: 08/873,970
FILING DATE: 12-JUN-1997
APPLICATION NUMBER: 08/997,362
FILING DATE: 23-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 31000.
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                            Sequence 7, Applic Patent No. 5487969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 6.3%;
Best Local Similarity 46.3%;
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                                                                                                                                                                                      GENERAL INFORMATION:
                                                      APPLICANT: Eberle, Richard
APPLICANT: Black, Darla
APPLICANT: Scinicariello, Franco
APPLICANT: Hilliard, Julia K.
TITLE OF INVENTION: Cloning and Amplification of Monkey
TITLE OF INVENTION: Virus Genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION DATA:
                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         247 ACTGCGGCGGTGGAGAACGTTGTCGACACCATCGTGCGCGCCGTGCACAAGGGTGAGAGC
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TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ENGTH:
                                                                                                                                                                                                                                                                                                                                     GGCGCTCAGTTCAAGGCTGTTGTCTCTG 454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             124;
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                                                                                                                                                                                                                                Application US/08042747A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   858 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IBM Compatible
Cox & Smith Incorporated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Diskette
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Pred. No. 0.027
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144; Indels
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Best Local Similarity
Matches 109; Conserv
                                                                                                                                                                                                                          Sequence 14, Application US/08911853
                                                                                                                                                                                           Patent No. 6048710 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2452
                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                         2632 GCAAGAAGGGCACGAGCGCCCTGCTGAGCGCGAAGGTTACCGACGCGGT 2680
                                                                                            CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                    2512 TGGCGGGCGGCGACGACGCGCGCGGAGGACTTTGACGAGGCCAAGCTGGCGCAGGCGC 2571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 2943 base pairs
TYPE: nucleic acid
                                                                                                             NUMBER OF SEQUENCES:
                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: 210-554-5500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/042,747A
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
COFFMIATOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          260 ccgaggctgctgttaacgccttccaggatgtgttcgtcgtcgaggctatgaagtccggcgaag 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200 acaacaagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcagg 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: 767609
                                        STREET: 925 Page
CITY: Palo Alto
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CITY: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: CLASSIFICATION:
                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
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                                                                             DDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                            gcaacccgcgcactggcgagcagattgacattccggcttcctacggcgt 428
                                                                                                                                                                                                                                                                                                                                                                      GGGAGATGATCCGCTACATGGCCCTGGTCTCGGCCATGGAGCGCACCGAGCACAAGGCCC 2631
                                                                                                                                                                                                                                                                                                                                                                                                    gcctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggcc 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94304-1013
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Texas
                                CA
                                                            925 Page Mill Road
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                                                                                                                                                           Quax, Wilhelmus J
                                                                                                                                                                         Gerritse, Gijsbert
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87..2744
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                                                                             Genencor International
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47.6%;
                                                                                                                           EXPRESSION EXPRESSION
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Pred. No. 0.081;
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                                                                                                                           SYSTEM FOR ALTERED LEVELS
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US-08-911-853-14
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                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14, Appli
Patent No. 6225106
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1950 base pair
                                                                                                                                                                                                                                                                                                                                   APPLICANT: Gerritse,
APPLICANT: Quax, Wil
TITLE OF INVENTION:
TITLE OF INVENTION:
                                          FILING DATE:
PRIOR APPLICATION DATA:
                                                                                              SOFTWARE: FastSEQ for CURRENT APPLICATION DATA:
                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 33,888
REFERENCE/DOCKET NUMBER: GC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-846-7620
                                                                                                                                                                                                                                                                                 ADDRESSEE: Genencor
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APPLICATION NUMBER: 08/6/
FILING DATE: 16-AUG-1996
                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 16-AUG-1996
ATTORNEY/AGENT INFORMATION:
NAME: Glaister, Debra J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
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TTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        632 TACTGGACGCCGCGAGGCACTGAACAACGCGGTGATGCGCAACGAGAAAAAACAGCGCCG 691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            209 ctgacctcgtttcgaagatcgcccagaagtccaacctgacccaaggctcaggccgaggctg 268
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         572 CCGAGCTCGATGCCCAGGGCGGCGGCGACTACAACGTGATCAACCTGCAGCATGCCTGGG 631
                                                                                                                          COMPUTER: IBM CON
OPERATING SYSTEM:
                                                                                                                                                                                                                                              STREET: 925 Page
CITY: Palo Alto
                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                                   STATE:
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                               APPLICATION NUMBER:
                                                                                                                                                                                                              COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
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                                                                                                                                                                                                94304-1013
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                                                                                                                                                                                                                                                                    925 Page Mill Road
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                                                                                                                                                                                                                                                                                                                                                                   Quax, Wilhelmus J
                                                                                                                                                                                                                                                                                                                                                                                   Gerritse,
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                                                                                                                                             IBM Compatible
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                                                                                                                              Sod
                                                                                                                                                                                                                                                                                                                                EXPRESSION SYSTEM FOR ALTERED EXPRESSION LEVELS
                                                                                                                for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                    Gijsbert
                                                                              US/09/479,409
                               08/911,853
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Pred. No. 0.28;
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TELECOMMUNICATION INFORMATION:

REFERENCE/DOCKET NUMBER:

NAME: Glaister, Debra REGISTRATION NUMBER:

33,888

GC361-2

TELEPHONE:

US-08-911-853-29

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Best Local Similarity 50.3%;
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                                                                             TELEFAX: 650-845-6504 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/911,853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 37
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genencor International
                                                                                                                                 TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: EXPRESSION SYSTEM FOR ALTERED TITLE OF INVENTION: EXPRESSION LEVELS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 1950 base pair
                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                           APPLICATION NUMBER: 08/69 FILING DATE: 16-AUG-1996 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
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TYPE: nucleic acid
STRANDEDNESS: single
 STRANDEDNESS:
                                                                                                                                             REFERENCE/DOCKET NUMBER: GC
                                                                                                                                                                         NAME: Glaister, Debra REGISTRATION NUMBER: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                          FILING DATE:
                                       ENGTH:
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                 nucleic acid
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                                                                                                                 650-846-7620
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single
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Patent No. 6225106
GENERAL INFORMATION:
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Best Local Similarity
                                                                                                                                                 Query Match
                                                                                                                              Best
                                                                                                                                                                                                                                                                                                                TELEFAX: 650-845-6504
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Gerritse,
APPLICANT: Quax, Wil
TITLE OF INVENTION:
TITLE OF INVENTION:
                                    2942 CCGAGCTCGATGCCCAGGCGCGGCGGCGACTACAACGTGATCAACCTGCAGCATGCCTGGG 2883
                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 33,888
REFERENCE/DOCKET NUMBER: GC.
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: Glaister, Debra J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2822 GCACCCGGGTGATTGCCGACGCCCGCCACCCAACCGCCTGATCCTCCGGCC 2772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
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269 ctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggcctgaagc 328
                                                                     209 ctgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaggccgaggctg 268
                                                                                                           Local Similarity 50.3%; hes 86; Conservative
                                                                                                                                                                                                                                    LENGTH: 17612 base pairs
TYPE: nucleic acid
STRANGEDNESS: single
                                                                                                                                                                                                                                                                                                                                                   TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                          TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/09/479,409
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                                                                                                         Score 35; DB 4
Pred. No. 0.87;
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                                                                                       SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, Robert D.
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                                                                                                                                                TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TITLE OF INVENTION: TUBERCULOSIS FILE REFERENCE: 24366-2007.00 CURRENT APPLICATION NUMBER: US/09/103,840A CURRENT FILING DATE: 1998-06-24
                                                                                                               NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn Ver
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OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
-09-103-840A-2
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APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
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APPLICANT: WHITE, Owen R
APPLICANT: FRASER, Clair
APPLICANT: VENTER, John
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    ORGANISM: Mycobacterium tuberculosis OTHER INFORMATION: H37RV
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                                                                   ENGTH: 4411529
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5215881-2/c
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APPLICANT: CHEUNG, ANDREW K.
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                                                                                                                                                                                                                                                                                                                                                         Sequence 1, Application US/07945283 Patent No. 5352596
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Best Local Similarity
Matches 69; Conserv
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Best Local
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                   TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                   COUNTRY: UZIP: 61604
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                                                                                                                                                                      1815 No.
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nilarity 54.8%;
Conservative
                                                                                                           USA
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                                                                                                                                                                                         Curtis P.
                                                                                                                                                           ; P. Ribando
5352596th University Street
                                                                                                                                                                                                                                                    Andrew K.
Ronald D.
Pseudorables Virus Deletion Mutants
Involving The EPO and LLT Genes
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TITLE OF INVENTION:

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; LOCATION:
US-07-945-283-1
                                                                                                                                                US-08-426-599B-3
                                                                                                                                                              RESULT 13
                                                                                                                      Sequence 3, Application US/08426599B Patent No. 5932438
                                                                                             Patent No. 355....Patent No. 355....
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                                                                APPLICANT:
            APPLICANT:
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NAME/KEY:
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LENGTH: 8438 base pair
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                                      APPLICANT:
                                                                                                                                                                                                                                                                      375 cggccgcaacccgcgcactggcgagcagattgacattccggccttcctacggcgttcgtat 434
                                                                                                                                                                                                                                                                                                                         315 cgaaggcctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcac 374
PPLICANT
                                                                                                                                                                                                                             435 ctccgc 440
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REGISTRATION NUMBER: 27976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE: 19920
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        Patino-Martin, Cristina
Kalo-Koenova, Eliza I.
del Moral-Juarez, Catalina
Faus-Santasusana, Ignacio
del Rio-Pericacho, Jose-Luis
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                        Rubio-Susan,
                                                                          Oriach-Marsal, Juan
Rubio-Susan, Victor
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622..6495
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replace(7010, "g")
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5512669-1
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                                                                                                                                                                                        Patent No. 5512669
                                                                                                                                        REDUCTASE
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Best Local Similarity
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TELEFAX: 202-783-6031
INFORMATION FOR SEQ ID NO:
                                                NUMBER OF SEQUENCES: 7
CURRENT APPLICATION NUMBER: US/
FILING DATE: 29-AUG-1994
PRIOR APPLICATION DATA:
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DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                     APPLICANT: PEOPLES, OLIVER P.; SINSKEY, ANTHONY J.
TITLE OF INVENTION: GENE ENCODING BACTERIAL ACETOACETYL-COA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ANTI-SENSE:
FEATURE:
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LENGTH: 624 base pairs
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NAME: Saxe, Stephen A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                 344 ccgctgagcgctcaagcgcccggctcgcaccggccgcaac 384
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                                                                                                                                                                                                                                                                             131 GCACCAAGGGCGGCAAGATCTGGGCCCGCACCGACTGCTAC 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                224 agategeecagaagteeaacetgaceaaggeteaggeegaggetgetgttaaegeettee 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US/08/426,599B FILING DATE: 21-APR-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                               71 TCGACGCCGGCGGCCGCCAGCTCAACTCCGGCGAGTCCTGGACCATCAACGTCGAGCCCG 130
                                                                                                                                                                                                                                                                                                                                                                                                                  11 AGATCGTCAACCGCTGCTCCTACACCGTCTGGGCCGCCGCCTCCAAGGGCCGACGCCGCCC 70
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STRANDEDNESS: double
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                 APPLICATION NUMBER: 124,570 FILING DATE: 20-SEP-1993
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SYSTEM: PC-DOS/MS-DOS
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NUMBER: 944,488
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th Street, N.W., Suite 701 East
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Pred. No. 0.2;
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5229279-1
;PATENT NO. 5229279
;APPLICANT: PEOPLES, OLIVER P.;SINSKEY, ANTHONY J.
;TITLE OF INVENTION: METHOD FOR PRODUCING NOVEL POLYESTER
Search completed: December 20, 2001, 20:35:15 Job time: 6221 sec
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; APPLICATION NUMBER: 566,535
; FILING DATE: 13-AUG-1990
; APPLICATION NUMBER: 67,695
; FILING DATE: 29-JUN-1987
;SEQ ID NO:1:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 8
CURRENT APPLICATION BATA:
APPLICATION NUMBER: US/07/556,535
FILING DATE: 13-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 67,695
FILING DATE: 29-AUG-1987
                                                                                                                                                                                                                                                   321 cctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgcaccggccg 380
                                                                                                                                                                           261 cgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaagg 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            479 ccagaacccggcccgccaggccgccatgaaggccggcgtgccgcaggaggcgaccgcctg 538
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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BG860650 1024672A0
AQ990760 Rfc01581
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/strain="C9" /db_xref="tax /db_xref="tax /clone="cM004 /clone="tb="c /dev_stage="p /note="vector Xhol"	: Yasukazu Nakamura St Laboratory for Pla DNA Research Institut 32-3, Kisarazu, Chiba ynakamu@kazusa.or.jp, Location/Qualifiers 1, .428	Chlamydomonas reinhardti Chlamydomonas reinhardti Chlamydomonas reinhardti Eukaryota; Viridiplantae Chlamydomonadaceae; Chla 1 (bases 1 to 428) Asamizu,E., Nakamura,Y., A large scale structural alga, Chlamydomonas rein non redundant expressed DNA Res. 6 (6), 369-373 20152988	428 bp Chlamydomonas e CM004f12_r,	1201 493 578 651 761 458 925 569 785 785 785 785 785 785 785 785 785 785
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Best Local Similarity 51.5%;
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Chlamydomonas reinhardtii.
Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
Chlamydomonadaceae; Chlamydomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Asamizu, E., Nakamura, Y., Sato, S., Fukuzawa, H. and Tabata, S. A large scale structural analysis of cDNAs in a unicellular alga, Chlamydomonas reinhardtii. I. Generation of 3433 non-redundant expressed sequence tags
DNA Res. 6 (6), 369-373 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AV393637 447 bp mRNA EST 29-SEP-2000
AV393637 Chlamydomonas reinhardtii C9 Chlamydomonas reinhardtii
cDNA clone CLO6bOl_r, mRNA sequence.
AV393637 GI:6547853
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Yana 1532-3, Kisarazu, Chiba 292-0812, Japan
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Location/Qualifiers
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/clone="CL06b01_r"
/clone_11b="Chlamydomonas reinhardtii C9"
/dev_stage="photoautotrophic growth"
/note="Vector: pBluescriptII SK-; Site_1:
                                                                                                                                                                                                                                                                                                           /strain="C9"
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                                                                                       9.9%;
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                                                                    Score 59.6; DB 10;
Pred. No. 1.1e-06;
0; Mismatches 129;
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GACCATCGTGGGCTTCGGCACGTTTGAGGTGCGCGAGCGCGCTGCGCCCAGGGCCGCAA
                                  gaageteaceggeetgtteteegetgagegegteaagegeeeggetegeaeeggeegeaa 383
                                                                                                                                                                                           ggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggcct 323
                                                                                                                                             GAAGGCCTTTGACTCCCTGATTGGCGGCATTGAGGACGCCCTCATCAACGGTGACCGCGT 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chlamydomonas reinhardtii.
Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The first Laboratory for Plant Gene Research .
Kazusa DNA Research Institute
Yana 1532-3, Kisarazu, Chiba 292-0812, Japan
Email: asamizu@kazusa.or.jp, URL:http://www.kazusa.or.jp/en/plant/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AV634084 Chlamydomonas reinhardtii 5% CO2 Chlamydomonas cDNA clone HC029a09_r 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Asamizu, E., Miura, K., Kucho, K., Inoue, Y., Fukuzawa, H., Nakamura, Y. and Tabata, S.
Generation of expressed sequence tags from low-CO2 and adapted cells of Chlamydomonas reinhardtii
DNA Res. 7 (5), 305-307 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Erika Asamizu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chlamydomonadaceae;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="Chiamydomonas reinhardtii 5% CO2"
/note="Vector: pBluescriptII SK-; Site_1: EcoRI; Site_2:
/note="Vector: pBluescriptII SK-; Site_1: EcoRI; Site_2: EcoRI; Site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:3055"
/clone="HC029a09_r"
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/strain="C9"
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                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 59.6; DB 10;
Pred. No. 1.1e-06;
0; Mismatches 129;
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MEDLINE
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                                                                                384 cccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctgg 443
                 444 ctccctgctgaagaaggccgtcaccg 469
                                                                                                                                                                                                           185
 365
                                                                                                                              245 GACCATCGTGGGCTTCGGCACGTTTGAGGTGCGCGAGCGCGCTGCGCGCCAGGGCCGCAA
                                                                                                                                                                         324
                                                                                                                                                                                                                                                                               125
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                                                                CCCCAGCACCGGCGCGGTCCTCCAGATCGCCGGCCAGCAAGGCCCCCGTGTTCAAGGCCTC
                                                                                                                                                    gaageteaceggeetgtteteegetgaageggeteaagegeeeggetegeaceggeeggeaa 383
                                                                                                                                                                                                    GAAGGCCTTTGACTCCCTGATTGGCGGCATTGAGGACGCCCTCATCAACGGTGACCGCGT
                                                                                                                                                                                                                             99ctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccggcgaaggcct 323
                                                                                                                                                                                                                                                                     CAAGGCTAAACTTGTGGAGGCGATCGCTACTGAGGTGGGACTGACCAAGGACGTCGCTGC 184
                                                                                                                                                                                                                                                                                          caagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaggccga 263
AGTTGGCCTGAAGGATGCCGTGAACG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctgg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chlamydomonas reinhardtii Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales; Chlamydomonadaceae; Chlamydomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Asamizu,E., Nakamura,Y., Sato,S., Fukuzawa,H. and Tabata,S. A large scale structural analysis of cDNAs in a unicellular green alga, Chlamydomonas reinhardtii. I. Generation of 3433
                                                                                                                                                                                                                                                                                                                                            Similarity 51.5
37; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The First Laboratory for Plant Gene Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              non-redundant expressed sequence tags DNA Res. 6 (6), 369-373 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AV387318 509 bp mRNA EST 29-SEP-2000 AV387318 Chlamydomonas reinhardtii C9 Chlamydomonas reinhardtii cDNA clone CM019f02_r, mRNA sequence.

AV387318
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Yana 1532-3, Kisarazu, Chiba
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ynakamu@kazusa.or.jp, URL:http://www.kazusa.or.jp/en/plant/.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yasukazu Nakamura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="Chlamydomonas reinhardtii c9"
/dev_stage="photoautotrophic growth"
/note="Vector: pBluescriptII SK-; Site_1:
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/clone="CM019f02_r"
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Pred. No. 1.2e-06;
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                                                                                                                                                                                                                                                                                                                                                Mismatches 129;
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Best Local Similarity
Matches 137; Conserv
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  394
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                                                                                                                                                                                                                                                                                                                                   154 CAAGGCTAAACTTGTGGAGGCGATCGCTACTGAGGTGGGGACTGACCAAGGACGTCGCTGC 213
                                                                                                                                                                                                                                                                                                                                                                           204 caagtotgacctcgtttcgaagatcgcccagaagtccaacctgaccaaggctcaggccga
                          ctccctgctgaagaaggccgtcaccg 469
                                                                             CCCCAGCACCGGCGCGGTCCTCCAGATCGCCGCCAGCAAGGCCCCCCGTGTTCAAGGCCTC
AGTTGGCCTGAAGGATGCCGTGAACG
                                                                                                            cccgcgcactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctgg 443
                                                                                                                                                               GACCATCGTGGGCTTCGGCACGTTTGAGGTGCGCGAGCGCGCTGCGCGCCAGGGCCGCAA
                                                                                                                                                                                                       gaageteaceggeetgtteteegetgagegegteaagegeeeggetegeaceggeegeaa 383
                                                                                                                                                                                                                                                   GAAGGCCTTTGACTCCCTGATTGGCGGCATTGAGGACGCCCTCATCAACGGTGACCGCGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grossman,A., Davies,J., Federspiel,N., Harris,E., Lefebvre,P., McDermott,J.P., Siliow,C., Stern,D. and Surzycki,R. Analyses of the Chlamydomonas reinhardtil Genome: A Model, Unicellular System for Analyzing Gene Function and Regulation vascular Plants; project phase 2 Unpublished (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
Chlamydomonadaceae; Chlamydomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Durham, NC 27708-1000, USA
Tel: 919 613 8164
Fax: 919 613 8177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Elizabeth H. Harris DCMB Box 91000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Duke University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chlamydomonas reinhardtii.
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                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            chlamy@duke.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mid-log phase in TAP (accetate containing) medium in the light, TAP medium in the dark, HS (minimal) medium in ambient levels of CO2 and HS medium bubbled with 58 CO2. PolyA mRNA was purified from each sample, pooled and cDNA synthesized. The cDNA was directionally cloned into lambda ZAP II (Stratagene) in the EcoRI (5') and XhoI (3') sites. pBluescript II SK plasmids were excised from the lambda ZAP clones by superinfection with EXASSISt (Stratagene) phage. The library was normalized using method 4 described in Bonaldo et al (1996) Genome Research 6: 791-806."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       XhoI; This library, constructed by John Davies and McDermott, combines cDNAs from CC-1690 cells grown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Chlamydomonas reinhardtii"
/strain="CC-1690 wild type mt+ 21gr"
/db_xref="taxon:3055"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 59.6; DB 10
Pred. No. 1.2e-06;
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DNA, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               normalized,
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444 ctccctgctgaagaaggccgtcaccg 469
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                                                                                                                                                         257 GACCATCGTGGGCTTCGGCACGTTTGAGGTGCGCGAGCGCGCCTGCGCGCCAGGGCCGCAA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1024072A08.y1 C. reinhardtii CC-1690, normalized, Chlamydomonas reinhardtii cDNA, mRNA sequence.
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Durham, NC 27708-1000
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DCMB Box 91000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Chlamydomonas reinhardtii"
/strain="CC-1690 wild type mt+ 21gr"
/db_xref="taxon:3055"
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TTTGAAAGACGCAGTTAAATAATTTCATT
                                gctgaagaaggccgtcaccgagtgacctt 478
                                                                                                                 cactggcgagcagattgacattccggcttcctacggcgttcgtatctccgctggctccct
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Tel: (44) 1225 826621
Tex: (44) 1225 826779
Email: bssrfc@bath.ac.uk
This is one of 2,122 random reads from the M13 library. For annotation of identified clones (BLASTX, BLASTN and mapping coli K12 genome) please see firench-Constant et al. 2000, Nu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ffrench-Constant,R.H., Waterfield,N., Burland,V., Perna,N.T Daborn,P.J., Bowen,D. and Blattner,FR. Agenomic sample sequence of the entomopathogenic bacterium Photorhabdus luminescens W14: potential implications for via Appl. Environ. Microbiol. 66 (8), 3310-3329 (2000)
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/note="Genomic DNA from strain W14 was size
kb) and then cloned into M13 Janus."
140 c 112 g 191 t 3 others
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 Photorhabdus luminescens.
Photorhabdus luminescens
Bacteria; Proteobacteria;
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Rfc00661 Photorhabdus luminescens'strain W14 M13 library
Photorhabdus luminescens genomic clone PLG00661, DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Erika Asamizu
The First Laboratory for Plant Gene Research
Kazusa DNA Research Institute
Yana 1532-3, Kisarazu, Chiba 292-0812, Japan
Email: asamizu@kazusa.or.jp, URL:http://www.kazusa.or.jp/en/plant/.
                                                                             AQ989976.1 GI:9648570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chlamydomonas reinhardtii.
Chlamydomonas reinhardtii
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
Chlamydomonadaceae; Chlamydomonas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AV637329 376 bp mRNA EST 15-DEC-2000 AV637329 Chlamydomonas reinhardtii 5% CO2 Chlamydomonas reinhardtii cDNA clone HC071g01_r 5', mRNA sequence.
AV637329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Generation of expressed sequence tags from low-CO2 adapted cells of Chlamydomonas reinhardtii DNA Res. 7 (5), 305-307 (2000)
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Asamizu,E., Miura,K., Kucho,K.,
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/note="Vector: pBluescriptII SK-; Site_1: EcoRI; Site_2:
XhoI; The cDNA library was constructed from cells cultured
in a medium with bubbling air containing 5% carbon
dioxide"
128 c 116 g 68 t
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Pred. No. 2
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gamma subdivision;
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2.3e-05;
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 Enterobacteriaceae;
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               123;
Bradyrhizobium japonicum.
Bradyrhizobium japonicum
Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group;
Bradyrhizobium group; Bradyrhizobium.
                                                                                                                                               AZ934085 800 bp DNA
BJ__Ba0001D18r B. japonicum
                                                                                 GSS.
                                                                                                                 genomic, DNA sequence.
AZ934085
                                                                                                 AZ934085.1 GI:13776145
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Email: bssrfc@bath.ac.uk

This is one of 2,122 random reads from the M13 library. For annotation of identified clones (BLASTX, BLASTN and mapping annotation of identified see ffrench-Constant et al. 2000, N
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20378633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seq primer: M13 Forward Class: shotgun.
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ffrench-Constant,R.H.; Waterfield,N., Burland,V., Perna,N.T.

Daborn,P.J., Bowen,D. and Blattner,F.R.

A genomic sample sequence of the entomopathogenic bacterium

Photorhabdus luminescens W14: potential implications for vir

Appl. Environ. Microbiol. 66 (8), 3310-3329 (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Department of Biolouriesity of Bath
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: ffrench-Constant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Photorhabdus
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131 c 137 g 166 t 4 others
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library Bradyrhizobium japonicum
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RESULT 1
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MEDLINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121;
                                                                         Triticum aestivum

Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Lillopsida; Poales; Poaceae; Pooideae
; Triticeae; Triticum.

1 (bases 1 to 663)
Anderson,O.D., Chao,S., Choi,D.W., Close,T.J., Fenton,R.D., Han,P.S., Hsia,C.C., Kang,Y., Lazo,G.R., Miller,R., Rausch,C.J.,
Seaton,C.L. and Tong,J.C.
The structure and function of the expressed portion of the wheat genomes - Pre-anthesis spike cDNA library
Contact: Olin Anderson
Contact: Olin Anderson
US Department of Agriculture, Agriculture Research
US Department of Regional Research Center
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Clemson University
100 Jordan Hall, Cl
Tel: 864 656 7288
Fax: 864 656 4293
                                                                                                                                                                                                                                                                                                     BF483682 663 bp mRNA EST 06-DEC-2000
WHE2336_F03_L06ZS Wheat pre-anthesis spike cDNA library Triticum
aestivum cDNA clone WHE2336_F03_L06, mRNA sequence.
BF483682
                                                                    Unpublished (2000)
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                                                                                                                                                                                                                                                         bread wheat.
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A marker-dense, sequence-ready map of the Bradyrhizobium japonicum
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: rwing@clemson.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genome Res. 11 (8), 1434-1440 (2001)
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/strain="USDA110"
/db_xref="taxon:375"
/clone_lib="B. japonicum BAC library"
/clone_se_"B. ;coli"
/lab_host="E. coli"
/note="Vector: pIndigo536; Site_1: HindIII"
/note="Vector: pIndigo536; Site_1: HindIII"
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Pred. No. 0.00097
0; Mismatches 9
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Fax: 5105595818
            for barley genomics
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                                                    Wing,R., Close,T.J., Kleinhofs,A., Wise,R.,
,Y., Anderson,H., Dale,J., Henry,D., Kernodl
,T., Saski,C., Schwartzbeck,J., Simmons,J.,
                                                                                                                                                                                   Hordeum vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae
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Site_1: EcoRI; Site_2: XhoI; Plants were grown in t
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/tlssue_type="Spike before anthesis"
/dev_stage="Adult plant"
/lab_host="E: coli SOLR"
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le, S., Palmer, M.,
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- Web: www.genoscope.cns.fr)
Determination of this BAC-end sequence was carried out as part collaboration with the European Drosophila Genome Project (EDC http://www.edgp.ebi.ac.uk - This Drosophila melanogaster BAC library (Dros BAC) was made by Alain Billaud at CEPH (Centre
                                                                                                                                                                            Plasmid Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pterygota; Neoptera; Endopterygota; Diptera; Brachycera;
Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 1201)
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BACN15K14 of DrosBAC library from
fly), genomic survey sequence.
                                                                                               Submitted (23-JUL-1999) Genoscope - Centre National de Sequencage BP 191 91006 EVRY cedex - FRANCE (E-mail : segref@genoscope.cns.fr
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100 Jordan Hall, Clemson,
                                                                                                                                                              Genoscope.
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                                                                                                                                          Direct Submission
                                                                                                                                                                                                                                                                              fruit fly.
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see http://www.genome.clemson.edu/projects/barley/ To
order a clone see http://www.genome.clemson.edu/orders"
a 276 c 201 g 174 t 4 others
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/tissue_type="Seedling shoot"
/lab_host="TJC121"
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The University of Georgia
Plant Sciences Building, Rm.
Tel: 706 542 1860
Fax: 706 542 1805
                                                                                                                                                                Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC clade; Panicoldeae; Andropogoneae; Sorghum.

1 (bases 1 to 493)
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DG1_126_E12.g1_A002 i
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                                                                Department of Botany
                                                                                 Unpublished (2000)
Contact: Cordonnier-Pratt
                                                                                                                                                                                                                                   Sorghum bicolor
                                                                                                                                                                                                                                                                                                    sequence.
BE356624
                                                                                                                                                 Cordonnier-Pratt,M.-M., Gingle,A., Marsala,C.,
                                                                                                                                                                                                                                                  sorghum
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/clone="BACN15K14"
/note="end : T7"
a 182 c 234 g
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/db_xref="taxon:7227"
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17.4%; Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mRNA sequence.
BI099174
BI099174.1 GI:
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACC clade; Panicoideae; Andropogoneae; Sorghum.
Sequences have been trimmed to exclude PolyA, vector and regions below Phred quality 16. The threshold for high quality sequence 20. Three-prime sequences, which are obtained with PolyTMix or T
                                                                                                                                                        The University of Georgia Plant Sciences Building, Frel: 706 542 1860
Fax: 706 542 1805
                                                                                                                                                                                                                                                                                                                                                                                  An EST database from Sorghum: 
Unpublished (2001)
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Sequences have been trimmed to exclude PolyA, vector and regions below Phred quality 16. The threshold for highest quality sequent
                                                                                                                 Email: mmpratt@uga.edu
                                                                                                                                                                                                                                                                                                                                           Contact: Cordonnier-Pratt MM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Klein, R.R., Cordonnier-Pratt, M.-M., Gingle, A.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sorghum bicolor
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                                                                                                                                                                                                                                                                                                            Department of Botany
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/note="Organ: 5-day-old dark-grown seedlings; Vector:
/note="Organ: 5-day-old dark-grown seedlings; Vector:
/note="Corgan: 5-day-old dark-grown seedlings; Vector:
/note="Corgan: 5-day-old dark-grown seedlings; Vector:
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: The library was made from poly-A RNA in the cloning vector lambda ZAP II.
/note="Corgan: 5-day-old dark-grown seedlings; Vector: 5-day-o
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/db_xref="taxon:4558"
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                                                                                                                                                                                                                                                                                             194 tggcatacaacaagtctgacctcgtttcgaagatcgcccagaagtccaacctgaccaagg
                                                                  289
                                                                                                                                     229
                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                Match 7.1%;
Local Similarity 47.9%;
TAACCCCCACCGCCCGG
                            teteegetggeteeetg 450
                                                                                      ccggccgcaacccgcgcactggcgagcagattgacattccggcttcctacggcgttcgta
                                                                                                                                                                                                      ACTCGGAAGGGTCAGCCGCCGGCGCCGCCGAGGAGGAAGACGATGAGGAGTGGGAGTTCA
                                                                                                                                                                                                                                     ctcaggccgaggctgctgttaacgccttccaggatgtgttcgtcgaggctatgaagtccg 313
                                                                  TGCGCGGCCTCACCGTCTGATGCATGGCTGCAGCAGCAGCGCCCCTGTTCCCGTGTCCGT
                                                                                                                                                                  gcgaaggcctgaagctcaccggcctgttctccgctgagcgcgtcaagcgcccggctcgca
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                                                                                                                                                                                                                                                                                                                                              123;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequencing primer, are presented as the reverse complement. Seq primer: {\tt T7}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High quality sequence start: 2 High quality sequence stop: 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 POLYA-No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     102
                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="Immature pannicle 1 (IP1)"
/note="Organ: Developing preanthesis pannicles; Vector:
pBluescript II SK(-) from Lambda Zap II; Site_1: XhoI;
Site_2: EcoRI; The library was made from poly-A RNA in the
cloning vector lambda ZaP II. Clones to be sequenced were
prepared by mass excision."

164 c 172 g 140 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Sorghum bicolor"
/cultivar="BTx623"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db_xref="taxon:4558"
365
                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                              Score 42.6; DB 11; Pred. No. 0.11;
                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                134;
                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                Length 578;
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                                                                                                                                                                                                                                                                                                                                            Gaps
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                                                                                                                                   288
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Title:

Sequence Sequence Sequence Sequence Sequence

Sequence Sequence Sequence

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Sequence

Sequence Sequence Sequence

Sequence

32, Appl 24, Appl 24, Appl 26, Appl 95, Appl 95, Appl 1781, Ap 7, Appl 8, Appl

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Minimum DB :
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Maximum Match 10
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re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.
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seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Issued_Patents_NA:*

1: /cgn2_6/ptodata/1,

2: /cgn2_6/ptodata/1,

3: /cgn2_6/ptodata/1,

4: /cgn2_6/ptodata/1,

5: /cgn2_6/ptodata/1,

6: /cgn2_6/ptodata/1,
                                                                                                                                                                                                                                                                                                                                                                Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       December 25, 2002, 11:24:49; Search time 43.6636 Seconds (without alignments) 1348.538 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441362 seqs, 153338381 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-816-391A-1_COPY_1_192
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Listing first 45 summaries
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Copyright (c) 1993 - 2002 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
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/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/Backfiles1.seq:*
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7650
168575
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US-08-943-731-128
US-08-943-731-128
US-08-943-731-3
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US-09-381-931-19
US-09-381-035-325
US-09-071-035-333
US-09-071-035-333
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US-09-071-035-333
Sequence 3, Appli
Sequence 12, Appl
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 671, App
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Sequence 189, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 19, Appli
Sequence 325, App
Sequence 325, App
Sequence 327, App
Sequence 327, App
Sequence 327, App
Sequence 328, Appli
Sequence 329, Appli
Sequence 320, Appli
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Patent No.
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                                                                                     TELEPHONE: 202-408-4000
TELEPAX: 202-408-4000
TELEFAX: 202-408-4400
INFORMATION FOR SEQ ID NO: 3:
                       SEQUENCE CHARACTERISTICS:
LENGTH: 3092 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Finnegan, Henderso
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA
ZIP: 20005-3315
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Tezuka, Kenichi
TITLE OF INVENTION: No. 5756664el Protein with Bone Formation
TITLE OF INVENTION: Ability and Process for Its Production.
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                      NAME: Hammond, Alan W.
REGISTRATION NUMBER: 35,178
REFERENCE/DOCKET NUMBER: 02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225555555
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Kikuno, Reiko
Takeshita, Sunao
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              cDNA to mRNA
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US-08-747-221B-24
US-08-747-221B-26
US-09-005-051-24
US-09-005-051-26
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US-09-222-775-95
US-09-134-001C-1781
US-08-222-719-7
US-08-471-613-7
PCT-US93-10443-7
US-08-961-527-87
US-08-961-527-87
US-08-961-527-87
US-08-961-527-87
US-08-961-527-87
US-08-961-527-87
US-08-158-232-50
US-08-611-928-50
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US-08-426-627-3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            quence 3, Application US/08477396A tent No. 5872235
                                                                     TELEFAX: (617) 451-0313
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/146,488
FILING DATE: 29-CCT-1993
FILING DATE: 1908 08/448,388
                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                             APPLICATION NUMBER: US 0:
FILING DATE: 28-MAY-1996
PRIOR APPLICATION DATA:
                                                    SEQUENCE CHARACTERISTICS:
                                                                                                        REFERENCE/DOCKET NUMBER: DE 
TELECOMMUNICATION INFORMATION: 
TELEPHONE: (617) 542-2290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ITLE OF INVENTION: A NOVEL TUMOR ITLE OF INVENTION: ISOLATING SAME UMBER OF SEQUENCES: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      686 ATTGCAACAAATGGTGTTGTCC 707
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY:
LOCATION:
                                                                                                                                                                             TTORNEY/AGENT INFORMATION:
NAME: Heine, Holliday C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           89 AACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATG 148
TYPE: nuclei
                                                                                                                                                           NAME: Heine, Holliday REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM:
                                                                                                                                                                                                                                APPLICATION NUMBER: PCT/US94/12502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE
                                      ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02109
                  nucleic acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Massachusetts
                                    3126 base pairs
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Liu, Yuan
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join(101..2375)
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n Post Office Square
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Placenta
                                                                                                                                                                                                                   31-OCT-1994
   single
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15.2%;
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                                                                                                                                              DFCI-333BX
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Pred. No. 1
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 15.2%;
Best Local Similarity 59.8%;
Matches 49; Conservative
                                                                                                                                                                                  TELEFAX: 202-408-4400 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ANTI-SENSE:
                                                                                                                                                                                                                                                 FILING DATE: 27 MAR-1992
AFTORNEY/AGENT INFORMATION:
NAME: Hammond, Alan W.
REGISTRATION NUMBER: 35,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin Rel
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS
                                                              MOLECULE TYPE:
ORIGINAL SOURCE:
                                                                                                                                               SEQUENCE CHARACTERISTICS:
LENGTH: 3253 base pair
                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
FILING DATE: 25-MAR-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649 AACCATTATCCTAATGGGGTTGTCACTGTTAATTGTGCTCGAATCATCCATGGGAACCAG 708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                709 ATTGCAACAAATGGTGTTGTCC 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              149 GACTAAGCAAAAGTGCTTGTCC 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                89 AACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATG 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY:
                                                                                                            LENGTH: 3253 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
NAME/KEY:
                                 CELL TYPE: osteosarcoma
                                                ORGANISM:
                                                                                                                                                                                                                 TELEPHONE:
                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER:
                                                                                                 COPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20005-3315
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Otawara-Hamamoto,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Takeshita, Sunao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43..2376
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                                                Homo sapiens
                                                                                                 linear
                                                                                                                                                                                                                   202-408-4000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Finnegan, Henderson, Farabow, Garrett &
                                                                                                                                                                                                                                                                                                              MBER: JP 4-71501
27-MAR-1992
                                                                                  cDNA to mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Egon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Reiko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No. 5756664el Protein with Bone Formation Ability and Process for Its Production.
                                                                                                                                                                                                                                                                                                                                                                      US 08/036,841
                                                                                                                                                                                                                                                                                                                                                                                                                                          US/08/426,627
                                                                                                                                                                                    <u>ب</u>
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                                                                                                                                                                                                                                                      02481-1285-00000
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Pred. No. 1.4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
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join(32..2540)

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US-08-943-731-128/c
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US-08-426-627-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence 128,
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Best Local Similarity 59.8%;
Matches 49; Conservative
                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Relectors application DATA:
APPLICATION NUMBER: US/C
FILING DATE: 03-OCT-1997
CLASSIFICATION: 435
                                                 TELEX: 831-494
NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 730 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCATION:
FEATURE:
NAME/KEY:
                                                                                                                                 FILING DATE: 03-DEC-1991
ANTORNEY/AGENT INFORMATION:
NAME: DOYLE LEARY Ph.D.,
REGISTRATION NUMBER: 36,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 01
FILING DATE: 14-MAR-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: ONE COMMERCE SQUARE, 2005 MARKET STREET, 22ND
                                                                                                 TELEPHONE: 215-965-1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING
TITLE OF INVENTION: ALTERED TYPE I OR TYPE IX COLLAGEN GENE SEQUENCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICANT:
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                                                                   TELEPHONE: 215 - 567-2991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                149 GACTAAGCAAAAGTGCTTGTCC 170
                                                                                                                                                                                                    APPLICATION NUMBER: FILING DATE: 03-DE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 19103-7086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89 AACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATG 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHILADELPHIA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALA-KOKKO, LEENA, et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROCKOP, DARWIN J.
SPOTILA, LORETTA D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KORKKO, JARMO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COLIGE, ALAIN EARLY, JAMES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEREDA, LARISA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LARSON, ANDREA W.
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join(97..2540)
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                                                                                                                                                                                                                      OS 07/803,628
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                                                   128:
                                                                                                                                    9598-27
                                                                                                                                                                    KATHRYN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 29.2; DB 1;
Pred. No. 1.4;
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US-08-330-154-1
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; MOLECULE TYPE:
US-08-943-731-128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-330-154-1
                            Query Match
 Best Local Similarity 62.0 Matches 44; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
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                                                                                                                                                                     TELEFAX: 317-276-1294
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 1257 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
PRIOR APPLICATION NUMBER: US/08/208,925
                                                                                                          FEATURE:
                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                          TELEPHONE: 317-276-3169
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                  FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       190 TTT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374 TTTCAGAAGTGACAGCCTTGACCAAGCTCAGCTGGCTATCCCCTGCCCTCTGAAGGCTGC 315
                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 27-OCT-1994
CLASSIFICATION: 435
UDR ADDITOR: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314 TCT 312
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/0 FILING DATE: 09-MAR-1994 APPLICATION NUMBER: US/0
                                                                                         NAME/KEY:
                                                                                                                                                                                                                                                                                   NAME: Hamilton, Amy E
REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: Indianapolis
STATE: Indiana
                                                                             LOCATION:
                                                                                                                                                                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 46285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
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les 41; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
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Lilly Corporate Center
                                                                        1..1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
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Skatrud, Paul L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alborn Jr., William E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
E: DNA (genomic)
                                                                                                                       DNA (genomic)
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               14.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEMA GENE OF STAPHYLOCOCCUS EPIDERMIDIS, FEMA PROTEIN, AND VECTORS AND MICROORGANISMS COMPRISING
                                                                                                                                                                                                                                                                                                                                                US/08/057,163
                                                                                                                                                                                                                                                                                    33,894
; Score 27.8; D; Pred. No. 3; 0; Mismatches
                                                                                                                                                                                                                                                                         x-8894
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Pred. No. 2
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Mismatches
                            DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4; Length 730;
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                          Length 1257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
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27;

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Gaps

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PATENT NO. 6380370

PATENT NO. 6380370

GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS

FILE REFERENCE: GTC-007
CURRENT PILING DATE: 1998-08-13
CURRENT FILING DATE: 1998-08-13
PRIOR APPLICATION NUMBER: US 60/064,964
PRIOR FILING DATE: 1997-10-88
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
SEQ ID NO 2393
LENGTH: 1269
TYPE: DNA
ORGANISM: Staphylococcus epidermidis
US-09-134-001C-2393
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US-09-134-001C-2393
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 3
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                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: PANITCH SCHWARZE JACOBS & NADEL, P.C.
STREET: ONE COMMERCE SQUARE, 2005 MARKET STREET, 22ND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 754 GAGGAACTAAA 764
                     COMPUTER READABLE FORM:
                                                                                                                                                                                                                     APPLICANT: ALA-KOKKO, LEENA, et al.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DETECTING
TITLE OF INVENTION: ALTERED TYPE I OR TYPE IX COLLAGEN GENE SEQUENCES
                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                     PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATG 148
                                                                                                                    STREET:
                                      COUNTRY: USA
ZIP: 19103-7086
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION:

    Application US/08943731

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                                                                                                 PHILADELPHIA
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                                                                                                                                                                                                                                                                                                                                                  PACK, MICHAEL
                                                                                                                                                                                                                                                                                                                                                                   LARSON,
                                                                                                                                                                                                                                                                                                                                                                                                                             SPOTILA, LORETTA D.
                                                                                                                                                                                                                                                                                                                                                                                                            DELTAS, CONSTANTINOS D.
                                                                                                                                                                                                                                                                                                                                                                                                                                         PROCKOP, DARWIN J.
                                                                                                                                                                                                                                                                                 KORKKO, JARMO
                                                                                                                                                                                                                                                                                                        , JAMES
                                                                                                                                                                                                                                                                                                                                                                   ANDREA W.
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US-09-221-017B-911/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 911, Application US/09221017B Patent No. 6444799
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEX: 831-494
INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10546 TCT 10544
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CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US 0
FILING DATE: 14-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
TELEPHONE: 215-965-1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: DOYLE LEARY Ph.D., KATHRYN
REGISTRATION NUMBER: 36,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/803,628
FILING DATE: 03-DEC-1991
                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM COMPATIBLE
OPERATING SYSTEM: Windows
OPERATING SYSTEM: Windows
SOFTWARE: FastSEQ for Windows Version 2.0b
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/221,017B
                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Ross, B. TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    130 TATCATTGATGACAACATGGACTAAGCAAAAGTGCTTGTCCCCTGACCCAAGAAGGATGC 189
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PP15
FILING DATE: 30-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     190 TTT 192
                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 03-OC
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OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                 CITY: Palo Alto
STATE: CA
                                                 APPLICATION NUMBER: PP11
FILING DATE: 31-DEC-1997
                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                ZIP: 94304-1018
                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
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65.1%;
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                                                                       PP1182
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                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFOGNATION:
APPLICANT: Berglind Ran Olafsdottir
APPLICANT: Jeffrey Gulcher
TITLE OF INVENTION: HUMAN NARCOLEPSY GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09426290 Patent No. 6410712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/426,290 CURRENT FILING DATE: 1999-10-25
                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ
                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE:
                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION FOR SEQ ID NO:
                                                                                                                         NAME/KEY: CDS
                                                                                                                                                          OCATION: (21181)...(21403)
NAME/KEY: CDS
                                                                                                                                                                                              NAME/KEY: CDS
                                                                                                                                                                                                                   EATURE:
                                                                                                                                                                                                                                                                  ENGTH: 168575
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LENGTH: 7650 base pair
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: UP
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APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: 650-813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99 AAACGCGGGTTTTCGCAGAAACATGCGCCTAGTATCATTGATGACAACAT 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39 ATCTTGTCTGATTCGTCTATTTTCAATACCTTCGGGGAAATAGATGTGAAAAACCCCTTATA 98
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Local Similarity 53.2%;
es 58; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRANDEDNESS:
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REGISTRATION NUMBER: 32,430
REFERENCE/DOCKET NUMBER: 27
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(127009)...(127130)
                                                                                                    (101753)...(101996)
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Pred. No. 8.4;
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5223394-8
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LINKAGE SIGNAL SEQUENCE
LUMBER OF SEQUENCES: 12
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent No. 5223394

APPLICANT: WALLINER, BARBARA

TITLE OF INVENTION: RECOMBI
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 48; Conserv
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Best Local Similarity
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LOCATION: (128910)...(129139)
                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IHM PC competible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                            NUMBER OF SEVEL.
CORRESPONDENCE ADDRESS:
ADDRESSEE: CUSHMAN DARBY & CUSHMAN, L.L.P.
ADDRESSEE: NOTE AVENUE, N.W.
                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                         APPLICANT:
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                                                                                                                                                    CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74 GGAAATAGATGTGAAAACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATC 133
                                                                                                                    COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
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                                                                                                    RY: U.S.A.
20005-3518
ARE: PatentIn Release #1.0, APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/08204288
                                                                                                                                                                                                                                                                        LEGRAND, Michel
                                                                                                                                                                                                                                                                               JOUANIN, Lise
KNIGHT, Mary E.
VAN MONTAGU, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                       FRITIG,
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                                                                                                                                                                                                                                                                                                                                                         Bernard
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                                                                                                                                                                                                                                        PLANTS
                                                                                                                                                                                                                                                      MODIFICATION OF LIGHIN SYNTHESIS IN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14.18;
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Pred. No. 34;
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                 Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6; Length 1009;
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; MOLECULE TYPE: DNA (genomic) US-08-204-288-3
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Best Local Similarity
Matches 42; Conserv
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534410
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TELEFAX: (202) 822-0944
TELEX: 6714627 CUSH
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 1244 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-188-582-12/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
WOLFORT
                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Weinzierl, Robert O.J.
TITLE OF INVENTION: TATA-BINDING PROTEIN ASSOCIATED FACTORS,
TITLE OF INVENTION: NUCLEIC ACIDS ENCODING TAFS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 861-3000
                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: PCT/CFILING DATE: 09-SEP-1992
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  564 ATCTCCAATAACATGTGGTAAATCAAAGTTAATACCCTTAATAGAGGGATGTTTGGAGAC 505
                 APPLICATION NUMBER: US/0 FILING DATE: 28-JAN-1994 CLASSIFICATION: 435
                                                                                                                                                                                                                            STREET: 4 Embarcades
CITY: San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                      DDRESSEE:
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                                                                                                                                                                                          94111-4187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08188582
                                                                                                                                                                                                                                                                  E: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT 4 Embarcadero Center, Suite 3400
                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                     Ruppert, Slegfried
Tanese, Naoko
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Comai, Lucio
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                                                                                                                                                                                                                                                                                                                                                                                                     Wang, Edith
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                                                       US/08/188,582
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Pred. No. 5.6;
0; Mismatches 2
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                                                                                           Version
                                                                                             #1.25
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US-08-646-715-12/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 910 277299 INFORMATION FOR SEQ ID NO:
                                  TELEX: 910 277299
NFORMATION FOR SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1238 CTGGGCGTGGAAGCCATAGAGTGGCTCGACATTCTTTAGCTTCAAGGCGTAGTCAATGT 1180
                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 781-1989
                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08
FILING DATE: 28-JAN-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPHONE: (415) 781-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                     TELEFAX:
                                                                                                                        REFERENCE/DOCKET NUMBER:
                                                                                                                                     NAME: Osman, Richard A REGISTRATION NUMBER: 36,627
                                                                                                                                                                                                                                                                 APPLICATION NUMBER: FILING DATE: 09-MA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 CTGGGCGCGGCGATGAAGTGGCTTGACAAGCATAATCTTGTCTGATTCGTCTATTT 60
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STRANDEDNESS: double
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REFERENCE/DOCKET NUMBER: A-57650-2/AJT/RAO
                                                                                                                                                                                                                                               CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET: 4 Embarcadero Center, Suite 3400 CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                          94111-4187
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INVENTION: TATA-BINDING PROTEIN ASSOCIATED FACTORS, INVENTION: NUCLEIC ACIDS ENCODING TAFS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                          California
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3182 base pairs
                                                                       (415)
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Tanese, Naoko
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Comai, Lucio
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Weinzierl, Röbert O.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, Edith
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CDS
972..3002
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                                    ID NO:
                                                                       398-3249
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TYPE: nucleic acid STRANDEDNESS: double TOPOLOGY: linear

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                                                                                                                         ; NAME/KEY:
; LOCATION:
US-08-306-546C-1
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US-08-306-546C-1
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                                                               Matches
                                                                                            Query Match
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Patent No. 5605797
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Best Local Similarity 66.1%;
Matches 39; Conservative
                                                                                                                                                                                                                                                                                  TELEPHONE: (810)641-1:
TELEFAX: (810)641-027:
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENERAL INFORMATION:
    3567
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MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE/DOCKET NUMBER: 65
TELECOMMUNICATION INFORMATION:
TELEPHONE: (810)641-1600
                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/306,5
FILING DATE: September 15, 1994
CLASSIFICATION: 435
                                                                                                                                                                                       MOLECULE TYPE: cDNA
                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Smith, Deann F.
REGISTRATION NUMBER: 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: BOVING TITLE OF INVENTION: of Use NUMBER OF SEQUENCES: 28
                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
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              75 GAAATAGATGTGAAAACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCA 134
                                                               Local Similarity hes 51; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM FC COMPACTIONS OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE: Michigan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STREET: P.O. Box 828
CITY: Bloomfield Hills
                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
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                                                                                                                                                                                                                                                     ENGTH:
GATTTGCATGTGATGAGCCTGGCAGCAAAGTGGTATTGCCTTTAACTTGAGATTGAACCA 3626
                                                                                                                                                                                                                                     nucleic acid
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                                                                                                                                                                                                                                                     3852 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                   (810)641-0270
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                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jones, Margaret
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen, Hong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Friderici, Karen
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972..3002
                                                                                                                                                                                                         linear
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                                                                                                                                                                                                                    double
                                                                            14.1%;
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                                                                            Score 27; DB 1; Length 3852; Pred. No. 8.8;
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Pred. No.
                                                            Mismatches
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                                                             Indels
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Search completed: December 25, Job time: 144.664 secs
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; LOCATION:
US-08-530-524A-1
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US-08-530-524A-1
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                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                          Matches
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INFORMATION FOR SEQ
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APPLICANT: Jones, Marg
APPLICANT: Chen, Hong
APPLICANT: Cavanagh, K
                                                               3627
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MEDIUM TYPE: Floppy disk
                                                                                                                         3567 GATTTGCATGTGATGAGCCTGGCAGCAAAGTGGTATTGCCTTTAACTTGAGATTGAACCA 3626
                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: 65
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
APPLICATION UMBER: US/08/
FILING DATE: September 19,
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION: NAME: Smith, Deann F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3627 TTTTAAAAAACACTGATTAATTATAATTGCT 3657
                                                                                             135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             135 TTGATGACAACATGGACTAAGCAAAAGTGCT
                                                                                                                                                        .75 GAAATAGATGTGAAAACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCA 134
                                                                                                                                                                                   Local Similarity 56.0%; es 51; Conserva+:..-
                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Bloomfield Hills
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE:
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Chen, Hong
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E: cDNA
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Database
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Listing first 45 summaries
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Maximum DB
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Perfect score:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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length: 2000000000
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Gapop 10.0 , Gapext 1.0
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1693.523 Million cell updates/sec
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Copyright (c) 1993 - 2002 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
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/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
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Result	Score	Query Match	Query Match Length	DB	ID	Description
_	192	100.0	600	10	US-09-816-391A-1	- ;
N	30.2	15.7	515	10	US-09-864-761-16206	sequence I, Appli
ω	29.2	15.2	3202	<u>.</u>	HS-09-925-201-471	sequence 15206, A
4	29.2	15.	777	1,0	DG-00-051 157 103	Sequence 471, App
л.) i	7.0	4	, -	US-09-954-456-193	Sequence 193, App
n (. L	4 L 3	10	US-09-867-701-2315	Sequence 2315, Ap
1	20.0	TU. 0	419	10	US-09-783-590-663	Sequence 663. Ann
	28.4	14.8	345	10	US-09-974-300-3770	Seguence 3770 An
0	28.4	14.8	75899	10	US-09-854-883-243	2 (
	27.6	14.4	727	10	US-09-770-149-122	Sequence 100 App
OT 10	27.4	14.3	484	10	US-09-747-155-261	Seguence 261 App
c 11	27.4	14.3	2000	ø	US-09-938-842A-4498	ddy / to a nomena
c 12	27.4	14.3	202001	10	US-09-734-674-3	dy 'octation and
C 13	27	14.1	389	10	US-09-867-701-2306	TINGS OF THE PERSON
C 14	27	14.1	1577	10	US-09-864-761-30755	Secuence 20755
c 15	27	14.1	1870	9	US-09-938-842A-3414	Secure 2017, A
c 16	27	14.1	1955	10	US-09-864-761-14202	CAucine Jara, Ap
c 17	27	14.1	2725	10	US-09-964-824A-243	Sequence 14202, A
c 18	27	14.1	2725	10	US-09-880-107-2181	Sequence 245, App
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US-09-960-352-2723	US-09-864-761-4151	US-09-783-590-5925	US-09-962-832-154	US-10-073-256-49	US-09-974-300-2838	US-10-001-857-5	US-09-777-564-1613	US-10-007-805-95	US-09-339-338-95	US-09-604-287A-95	US-09-933-797-133	US-09-780-172-18	US-09-070-927A-230	US-09-901-940-3	US-09-939-980-102	US-09-938-842A-2759	US-09-974-300-998	US-09-867-701-8723	US-09-764-878-292	771	US-09-771-161A-74	783	US-09-974-300-2801	US-09-879-957-189	US-09-880-107-2287
sequence 4151, Ap Sequence 2723, Ap	C76C	n +	Today 121 South		Sequence 2838 An			Todde of the Triber	Today (conservation)		Sequence 133, App	Sequence 18. Appl	Sequence 230 Apprix	Sequence 3 Appli	Sequence 102. App	Sequence 2759, Ap	Sequence 998, App	Sequence 8723. An	Sequence 292, Appr		Sequence 74. April	Sequence 4530. An	Sequence 2801, Ap	Sequence 189. App	Sequence 2287. An

ALIGNMENTS

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CURRENT APPLICATION NUMBER: US/09/816,391A
CURRENT FILING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: JP 00/287688
PRIOR FILLING DATE: 2000-09-21
NUMBER OF SEQ ID NOS: 3
SEQ ID NO 1
LENGTH: 600
TYPE: DNA
ORGANISM: Bifldobacterium longum
FEATURE:
NAME/KEY: CDS
LOCATION: (193)..(471)
US-09-816-391A-1
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                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: FUJIMORI, Minoru
APPLICANT: TANIGUCHI, Shun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09816391A Patent No. US20020054865A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: YAZAWA, Kazuyuki
APPLICANT: KANO, Yasunobu
APPLICANT: NAKAMURA, Toshiyuki
APPLICANT: SASAKI, Takayuki
TITLE OF INVENTION: Anaerobic bacterium as a drug for cancer gene therapy
FILE REFERENCE: 2001-WMC/01736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
121 ATGCGCTAGTATCATTGATGACAACATGGACTAAGCAAAAGTGCTTGTCCCCTGACCCAA 180
                                                                        61 TCAATACCTTCGGGGAAATAGATGTGAAAAACCCTTATAAAAACGCGGGGTTTTCGCAGAAAC 120
                                                                   13
                                                                                                                              1 GCTGGGCGCGGCCATGAAGTGGCTTGACAAGCATAATCTTGTCTGATTCGTCTATTT 60
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                                                     AMANO, Jun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TANIGUCHI, Shunichiro
                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                         100.0%; Score 192; DB 10; 100.0%; Pred. No. 3.1e-57; tive 0; Mismatches 0;
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                                                                                                                ; OTHER INFORMATION: MAP TO ACOOO062.1
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = US-09-864-761-16206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16206, Application US/09864761 Patent No. US20020048763A1
                                   Query Match
Best Local Similarity
Matches 77; Conserv
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SEQ ID NO 16206
LENGTH: 515
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PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR APPLICATION NUMBER: US 09/632,366
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PRIOR APPLICATION NUMBER: GB 24263.6
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CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
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                                                                                                                                                                                                                    TYPE: DNA
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                                                                                                                                                                                FEATURE:
                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 ATGCGCTAGTATCATTGATGACAACATGGACTAAGCAAAAGTGCTTGTCCCCTGACCCAA 180
13 GGCCATGAAGTGGCTTGACAAGCATAATCTTGTCTGATTCGTCTATTTTCAATACCTTCG 72
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/608,408 FILING DATE: 2000-06-30 APPLICATION NUMBER: US 09/774,203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: PCT/US01/00661 FILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: PCT/US01/00663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US01/00668
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                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 60/234,687 FILING DATE: 2000-09-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US01/00670
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                                       Conservative
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                                                          15.7%;
49.7%;
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                                                          Score 30.2;
Pred. No. 0.
                                         Mismatches
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US-09-925-301-471
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                                                                                                                                                                                                                                Sequence 193, Application US/09954456 Patent No. US20020115057A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US00/05882 PRIOR FILING DATE: 2000-03-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/9,25,301
CURRENT FILING DATE: 2001-08-10
                                                                               CURRENT APPLICATION NUMBER: US/09/954,456
CURRENT FILING DATE: 2001-09-18
PRIOR APPLICATION NUMBER: US/60/233,617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver.
                                                                                                                                               TITLE OF INVENTION: Process for Identifying Anti-Cancer Therapeutic Agents Using TITLE OF INVENTION: Sets FILE REFERENCE: 689290-76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 1694
                    PRIOR APPLICATION NUMBER: US/60/234,052 PRIOR FILING DATE: 2000-09-20
                                                                                                                                                                                                                     APPLICANT: Young,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: PA106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Rosen et al.
                                                             PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature LOCATION: (3180)
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LOCATION: (3160)
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NAME/KEY: misc_feature
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 3202
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                                                                                                                                                                                                                                                                                                                                                                                             683 ATTGCAACAAATGGTGTTGTCC 704
                                                                                                                                                                                                                                                                                                                                                                                                                                      149 GACTAAGCAAAAGTGCTTGTCC 170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133 CATTGATGACAACATGGACTAAGCAAAAGTGCTTG 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89 AACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATG 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                73 GGGAAATAGATGTGAAAACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTAT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
APPLICATION NUMBER: US/60/234,923
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                                                                                                                                                                                                                     Paul
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Pred. No. 3;
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APPLICATION NUMBER: US/60/235,134 FILING DATE: 2000-09-25

FILING DATE: 2000-09-25

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APPLICANT: Aglate, Paul A.

APPLICANT: Unces, Robert
APPLICANT: Harlocker, Susan L.

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER
FILE REFERENCE: 210121.497
CURRENT APPLICATION UNUMBER: US/09/867,701
CURRENT FILING DATE: 2001-05-29
NUMBER OF SEQ ID NOS: 10912
SOPTWARE: FastSEQ for Windows Version 4.0
LENGTH: 413
         В
                                                                                                                                             FEATURE:

NAME/KEY: misc_feature

LOCATION: (1)...(413)

OTHER INFORMATION: n = A,T,C or G

US-09-867-701-2315
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Best Local Similarity
""+"ches 73; Conserve
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; ORGANISM: Homo sapiens
US-09-954-456-193
                                                                                   Matches
                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2315, Application US/09867701 Patent No. US20020132237A1
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PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: US/60/235,863
PRIOR FILING DATE: 2000-09-27
NUMBER OF SEQ ID NOS: 2276
                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapien
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1284 TCATGAAGATTTGGCCTACTCTTCTTATGTCCACCAGTATAGCTCTGGGAAATTTGACAA 1343
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107 CAGCATGATGCCTCATGCNTGTANTTTCAATACTTTGGGAGGCTTAGGTGGGAGGATCAC 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100 AACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATGGACTAAGCAAA 159
                   35 CATAATCTTGTCTGATTCGTCTATTTCAATACCTTCGGGGAAATAGATGTGAAAACCCT 94
                                                                                   Local Similarity les 45; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/60/235,720 FILING DATE: 2000-09-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/60/235,711 FILING DATE: 2000-09-27
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milarity 50.0%;
Conservative
                                                                               Conservative
                                                                                                 15.0%;
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Pred. No. 1.6;
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Pred. No. 4.2;
O; Mismatches
                                                                               Mismatches
                                                                                                                   DB 10;
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US-09-783-590-663
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SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 08/420,856
PRIOR FILING DATE: 1995-04-12
PRIOR APPLICATION NUMBER: 08/346,731
PRIOR FILING DATE: 1994-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Human Genes, Sequences, FILE REFERENCE: PO-16.2C1
CURRENT APPLICATION NUMBER: US/09/783,590
CURRENT FILING DATE: 2000-02-15
                                                    OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc feature LOCATION: (290) OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                  LOCATION: (220)
OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
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LOCATION: (173)
OTHER INFORMATION: n equals a,t,g,
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OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc feature
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                        NAME/KEY: misc feature LOCATION: (313)
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OTHER INFORMATION: n equals a,t,g,
                                                                                                                                                                                                                                                                       OTHER INFORMATION: n equals a,t,g, or NAME/KEY: misc feature
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OTHER INFORMATION: n equals a,t,g, or c
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                                                                                                                                    NAME/KEY: misc feature LOCATION: (273)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OTHER INFORMATION: n equals a,t,g,
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OTHER INFORMATION: n equals a,t,g, or
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OTHER INFORMATION: n equals a,t,g,
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THER INFORMATION: n equals a,t,g, or
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OTHER INFORMATION: n equals a,t,g, or
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LOCATION: (169)
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NAME/KEY: misc feature LOCATION: (332) OTHER INFORMATION: n equals a,t,g, LOCATION: (315)
OTHER INFORMATION: n equals a,t,g,

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                                                                                                                                                                                                                                    Sequence 3770, Application US/09974300 Patent No. US20020146721A1
                                                                                                                                                                                                                     GENERAL INFORMATION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                               APPLICANT: Clausen, ID Groth
TITLE OF INVENTION: Methods For Monitoring Multiple Gene
TITLE OF INVENTION: Expression
FILE REFERENCE: 10085.500-US
CURRENT APPLICATION NUMBER: US/09/974,300
CURRENT FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: 60/279,526 PRIOR FILING DATE: 2001-03-27 NUMBER OF SEQ ID NOS: 8481
                                                                                                                                                                                 APPLICANT: Berka, Randy M. APPLICANT: Clausen, Ib Gr
                                                 PRIOR APPLICATION NUMBER: 09/680,598
PRIOR FILING DATE: 2000-10-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc feature
LOCATION: (413)
OTHER INFORMATION: n equals a,t,g, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
LOCATION: (397)
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OTHER INFORMATION: n equals a,t,g,
NAME/KEY: misc feature
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OTHER INFORMATION: n equals a,t,g,
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NAME/KEY: misc feature
LOCATION: (340)
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OTHER INFORMATION: n equals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
                                                                                                                                                                                                                                                                                                                                                                                  102 CGCGGGTTTTCGCAGAAACATGCGCTAGTATCATTGATGACAACATGGACTAAGCAAAA 160
                                                                                                                                                                                                                                                                                                                                                                                                                      175 TTTCCTTTGTCTTTAAATCTCAACACTTTGGGAGACCAAGGTGGGNGGATGGCTTGAAGC 234
                                                                                                                                                                                                                                                                                                                                                235 CAGGAGTTTNTGANCCACCCTGGGGNANCATAAGTGAGNACCCCATGTTTTACAANAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                          42 TTGTCTGATTCGTCTATTTTCAATACCTTCGGGGAAATAGATGTGAAAACCCTTATAAAA 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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50.4%;
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Pred. No. 1.6;
0; Mismatches
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                                                                       ; GENERAL
                                                                                      Sequence 122, Application US/09770149 Patent No. US20020059663A1
APPLICANT:
APPLICANT:
APPLICANT:
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INFORMATION:

Gorlach, Jorn

An, Yong-Qiang Hamilton, Carol Price, Jennifer

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; TYPE: DNA
; ORGANISM: Bacillus licheniformis
US-09-974-300-3770
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SEQ ID NO 3770
LENGTH: 345
                                                                                                                                                                                                                                                                                            SEQ ID NO 243
LENGTH: 75899
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                                                                                                                                               Matches
                                                                                                                                                                             Query Match
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PRIOR FILING DATE: 2000-01-18
NUMBER OF SEQ ID NOS: 389
                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/854,883
CURRENT FILING DATE: 2001-05-14
PRIOR APPLICATION NUMBER: US 09/629,644
PRIOR FILING DATE: 2000-07-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: ANTISENSE MODULATION OF FILE REFERENCE: ISPH-0576
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16482 GAGTTTGGTCTTCTATCCAGGATGCC 16457
                                                                    16542 ATTTTCACTCTCCTCCGCAAATCAGAAAACAAAAGCATAATCAAACTGGGGTCTTCTGCA 16483
                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                117 AAACATGCGCTAGTATCATTGATGAC 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             137 GATGACAACATGGACTAAGCAAAAGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 198 AAGAGAATTTTTTACAAATTTCACAAGTTGTTCAAATTTCAATATTGAAACAGTCGTTTT 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        57 ATTTTCAATACCTTCGGGGAAATAGATGTGAAAAACCCTTATAAAACGCGGGTTTTCGCAG 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   77 AATAGATGTGAAAACCCTTATAAAACGCGGGTTTTCGCAGAAACATGCGCTAGTATCATT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 ATGAAGTGGCTTGACAAGCATAATCTTGTCTGATTCGTCTATTTTCAATACCTTCGGGGA 76
                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 49.3 es 74; Conservative
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Jacqueline Wyatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Robert McKay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Susan M. Freier
Brett P. Monia
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                                                                                                                                             Conservative
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                                                                                                                                                              Score 28.4;
Pred. No. 26;
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Pred. No. 2
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                                                                                                                                               Mismatches
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                                                                                                                                                                               Length 75899;
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RESULT 10
US-09-747-155-261/c
(US-09-747-155-261/c
(US-09-747-155-261/c
(Sequence 261, Application US/09747155

Patent No. US20020151692A1
(GENERAL INFORMATION:
(APPLICANT: Rouguler, Sylvie
(APPLICANT: Giorgi, Dominique
(TITLE OF INVENTION: No. US20020151692A1el Polypeptides and Nucleic Acids Encoding
(FILE REFERENCE: 19904-008 (C009B6834US)
(CURRENT PEPLICATION NUMBER: US/09/747,155
(CURRENT FILING DATE: 2000-12-21
(CURRENT FILING DATE: 2000-12-21)
       δÃ
                                                                                                            ; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(484)
; OTHER INFORMATION: Taxon = 34829; gene = ERU159; pseudogene; Accession DDBJ/EMBL/Gen
US-09-747-155-261
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Best Local Similarity
Watches 42; Conserve
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SEQ ID NO 122
LENGTH: 727
                                           Matches
                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                 SEQ ID NO 261
LENGTH: 484
TYPE: DNA
ORGANISM: Eulemur rubriventer
                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/171,746
PRIOR FILING DATE: 1999-12-22
NUMBER OF SEQ ID NOS: 431
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CURRENT FILING DATE: 2001-01-26
PRIOR APPLICATION NUMBER: 60/178,506
PRIOR FILING DATE: 2000-01-27
NUMBER OF SEQ ID NOS: 999
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APPLICANT: Hurban, Patrick
TITLE OF INVENTION: Expressed Sequences of Arabidopsis
TITLE OF INVENTION: thaliana
TILE REFERENCE: 2024 (PARA-013ppv)
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19 GAAGTGGCTTGACAAGCATAATCTTGTCTGATTCGTCTATTTTCAATACCTTCGGGGAAA 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29 GACAAGCATAATCTTGTCTGATTCGTCTATTTTCAATACCTTCGGGGAAATAGATGTGAA 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         89 AACCCT 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FastSEQ for Windows Version 4.0
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Ledford, Brooke L.
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                                         Conservative
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                                                      14.3%;
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                                                        Score 27.4; Di
Pred. No. 5.1;
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                                                                       DB 10;
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                                     Gaps
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                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: WEL, Ming-Hui et al
TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENC
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL001018
                                                                                                              SOFTWARE: FastSEQ
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 5379
SEQ ID NO 4498
LENGTH: 2000
                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/09734674 Patent No. US20020081648A1
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Best Local S
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                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/734,674
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/300,111
PRIOR FILING DATE: 2001-06-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Harper, Jeff
APPLICANT: Kreps, Joel
APPLICANT: Wang, Xun
APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT FILING DATE: 2001-08-24
NAME/KEY: misc_feature
LOCATION: (1)...(202001)
                                                           ORGANISM: Human
                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
                                          FEATURE:
                                                                                               LENGTH: 202001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   91 C 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31 CAAGCATAATCTTGTCTGATTCGTCTATTTTCAATACCTTCGGGGAAATAGATGTGAAAA 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           143 TGCCA 139
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            203 TATCTGAGCATATGAGTTTAAGAGCCAGGATCTCACAGGTAATATGATCAATGACATTAT 144
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION:
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40; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                 for Windows Version 4.0
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Pred. No. 10;
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                                                                                                                                                                                                                                           ENCODING HU
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                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-09-864-761-30755/c
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; ORGANISM: Homo sapien
US-09-867-701-2306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-867-701-2306/c
                                                                                                                                                                                                                                                                                                                                            Sequence 30755, Application Patent No. US20020048763A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 2306 LENGTH: 389
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Best Local :
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                PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR EILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR EILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR EILING DATE: 2000-08-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY TITLE OF INVENTION: AND DIAGNOSIS OF OVARIAN CANCER FILE REFERENCE: 210121.49.
CURRENT APPLICATION NUMBER: US/09/867,701
CURRENT FILING DATE: 2001-05-29
                                                                                                                                       FILE REFERENCE: Acomica-x-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
                                                                                                                                                                                              APPLICANT: Penn, Sharron G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC
TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Jones, Robert
APPLICANT: Harlocker, Susan L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 10912
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                 218 ATGAACCCAGGGGTT 204
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95 TATAAAACGCGGGTT 109
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Local Similarity 60.08;
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hes 43; Conserv
APPLICATION NUMBER: GB 24263.6
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Pred. No. 6.4;
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Pred. No. 91;
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US-09-938-842A-3414/c
; Sequence 3414, Application
; Patent No. US20020160378A1
; GENERAL INFORMATION:
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Best Local :
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LENGTH: 1577
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TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TITLE OF INVENTION: SAME, AND METHODS OF USE FILE REFERENCE: SCRIP1300-3
CURRENT APPLICATION NUMBER: US/09/938,842A
CURRENT FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR APPLICATION NUMBER: US 60/264,647
                                                                                                                                                                                                  APPLICANT: Harper, Jeff
APPLICANT: Kreps, Joel
APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
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PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
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PRIOR APPLICATION NUMBER: PCT/US01/00666
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OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 6.2

OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 6.2

OTHER INFORMATION: NT HIT: M19828.1, EVALUE 0.00e+00

OTHER INFORMATION: EST_HUMAN HIT: R06764.1, EVALUE 0.00e+00

OTHER INFORMATION: SWISSPROT HIT: P04114, EVALUE 0.00e+00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                      508 CATTGAAAAATTAAAAAGTCTTG
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FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00664
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FILING DATE: 2001-01-30
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APPLICATION NUMBER: PCT/US01/00662
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Result
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Maximum DB
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Maximum Match 100%
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score greater than or equal to the score of the result bein and is derived by analysis of the total score distribution.
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length: 2000000000
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Gapop 10.0 , Gapext 1.0
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/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
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ALIGNMENTS

; TOPOLOGY: L: ; MOLECULE TYPE: US-08-602-359A-31 RESULT 1 US-08-602-359A-31 Sequence 31 Patent No. TELEFAX: 619-678-5099 INFORMATION FOR SEQ ID NO: ATTORNEY/AGENT INFORMATION: NAME: HAILE, LISA A. REGISTRATION NUMBER: 38,347 REFERENCE/DOCKET NUMBER: 0901 TELECOMMUNICATION INFORMATION: TELEPHONE: 619-678-5070 TELEPAX: 619-678-5099 GENERAL INFORMATION: FILING DATE: February CLASSIFICATION: 435 PRIOR APPLICATION DATA: COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 INCH DISKETTE COMPUTER: IBM PS/2 APPLICANT: SEQUENCE CHARACTERISTICS: LENGTH: 936 NUCLEOTIDES CURRENT APPLICATION DATA: APPLICANT: CORRESPONDENCE ADDRESS APPLICANT: KOSMOTKA, Anna TITLE OF INVENTION: ESTERASES NUMBER OF SEQUENCES: 42 APPLICANT: APPLICANT: APPLICANT: LENGTH: 936 NC. TENGTH: 936 NC. SING OPERATING SYSTEM: MS-DOS SOFTWARE: WORD PERFECT 6.0 ADDRESSEE: STREET: 42 STRANDEDNESS: CITY: LA JOLLA STATE: CALIFORNIA FILING DATE: COUNTRY: APPLICATION NUMBER: APPLICATION NUMBER: ZIP: 92037 1, Application US/08602359A 5942430 4225 EXECUTIVE SQUARE, ROBLE MURPHY, DC TO, John And USA WARREN, Patrick V. MAFFIA, IBM PS/2 ROBERTSON, Daniel FISH & RICHARDSON P. February 16, 1996 GENOMIC DNA SINGLE Steven Anthony Dennis US/08/602,359A 09010/010001 Ħ STE 1400

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us-08-672-850-11/c
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                             Sequence 11, Application US/08672850 Patent No. 6140117
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 907 base pairs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/672,850
FILING DATE: 24-JUL-1996
 APPLICANT:
                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Silva, Robin M
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                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
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Milbrandt, Jeffrey
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Pred. No. 2.9;
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Sequence 10, Application US/08672850 Patent No. 6140117
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APPLICANT: Milbrandt, JeffraPPLICANT: Araki, Toshiyuki
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INFORMATION FOR SEQ ID NO:
                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
"NOTICY/MATCH MINAPED IT G/08/672.850
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LENGTH: 907 base pairs
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NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,
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OPERATING SYSTEM:
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STATE: California
                                                                                                                                                                                           CITY: San Francisco
STATE: California
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APPLICATION NUMBER: FILING DATE: 24-JUI
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SYSTEM: PC-DOS/MS-DOS
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  24-JUL-1996
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Matches Query Match

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TELEPHONE: 317-276-2459
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 43280 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
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Patent No. 587699
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
NAME: Plant, Thomas, G.
REGISTRATION NUMBER: 35,784
REFERENCE/DOCKET NUMBER: X-
                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM Compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: ASCI(DOS) Text only
CURRENT APPLICATION DATA:
                                                                         MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS:
TOPOLOGY: unk
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
THOMAS G. PLANT 1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: POLYKETIDE SYNTHASE GENES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Kuhstoss, Stuart A. APPLICANT: Rosteck, Paul R., Jr. APPLICANT: Sutton, Kimberly L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 1001 base pair:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     528 CCCGAAGGCTGTAATGAAAACATTGATGACCACAGTGAAGAAGACCAAGATGGTGGCTGC 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                468 GTTGTTGAGCTGGTTGAGT 450
                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/804,227C FILING DATE: February 21, 1997 CLASSIFICATION: 435
                                              NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Silva, Robin M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
les 46; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: A-63610
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTTTGTTGTGGTGCTGT 89
                                                                                                                                                                                                                                                                                                                                                                                                                         46285
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LILLY CORPORATE CENTER
                           CDS
816..14234
                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                           linear
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                                                                                                                                                                                                                                                                                                                                                                    E: Floppy disk
IBM Compatible
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                                                                        DNA (genomic)
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Pred. No. 3
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                                                                                         RESULT 7
US-08-674-887A-5/c
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; NAME/KEY: CDS
; LOCATION: (87)..(1019)
US-09-198-092-1
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APPLICANT: Koma, Yoshinori
APPLICANT: Komatsu, Akira
TITLE OF INVENTION: BETA-CAROTENE HYDROXYLASE GEN
FILE REFERENCE: 07898/033001
CURRENT APPLICATION NUMBER: US/09/198,092A
CURRENT FILING DATE: 1998-11-23
EARLIER APPLICATION NUMBER: JP97/331936
EARLIER FILING DATE: 1997-12-02
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                                                             Sequence 5, Application US/08674887A Patent No. 5939300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO
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Best Local Similarity 55.0
Matches 50; Conservative
                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/09198092A Patent No. 6214575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 8
                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Citrus unshiu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13202 CGCCTTCGGCCGCATGACGGTACCGATCCG 13173
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13262 GACCGCGAACACCGACAGCGGGCTGGTCCGGGTCAGTTCGTGCAGGTTCAGCGCCGCGTC 13203
                 APPLICANT:
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    APPLICANT:
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NAME/KEY:
LOCATION:
                                                                                                                                                                                                               111 TGGCGGCCAATAGTCCGACCGCCATGGTGGGGTTTTGTTTTGTTTTACGAGGTTTTGGGTTT 52
                                                                                                                                                                                                                                                                        Local St. 39;
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NAME/KEY:
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                                                                                                                                                                                                                                        37 TGACGACAAAGACCCCGACCGAGATGGTCGGGGTCTTTTTGTTGTGGTGCTGTGACGTGT 96
                                                                                                                                                          51 T 51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98 GTCCAACCGTATTATTCCGGACTAGTTCAG 127
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LOCATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                         1158
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Robertson, Dan E.
Sanyal, Indrajit
Adhikari, Robert
                                                                                                                                                                                                                                                                                Conservative
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20010..31199
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31232..36067
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36249..41774
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Pred. No. 4.5;
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Pred. No. 17;
0; Mismatches
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Gaps

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COUNTRY:

TOPOLOGY:

LOCATION:

TITLE OF INVENTION: CANUMBER OF SEQUENCES: 6

CATALASES

ADDRESSEE:

Jolla

E: Fish & Richardson P.C. 4225 Executive Square, Suite 1400

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US-08-674-887A-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 2262 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
NAME: Halle, Ph.D., Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 09015/002001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: IBM Compatible
OPERATING SYSTEM: Windows95
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
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                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 INCH DISKETTE
COMPUTER: IBM PS/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                           TITLE OF INVENTION:
                                                                                                                                                                                                                        TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                            PPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: FILING DATE: 03-JUI
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COMPUTER: IBM F57.
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 5.1
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                                                                                                                            CITY: ROSELAND
STATE: NEW JERS
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                                                                                             COUNTRY: U
ZIP: 07068
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                                                                                                                                                                                             DDRESSEE:
                                                                                                                                                                                                                                                                           INFORMATION:
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                                                                                                                            NEW JERSEY
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E: CECCHI, STEWART & OLSTEIN
6 BECKER FARM ROAD
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INFORMATION FOR SEQ ID NO: 5:
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LENGTH: 2262 NUCLEOTID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION: TELEPHONE: 201-994-1700
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MEDIUM TYPE: Diskett
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 TELECOMMUNICATION INFORMATION: TELEPHONE: 619/678-5070
                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
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                                                                               ATTORNEY/AGENT INFORMATION:
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                                                                                                                               PRIOR APPLICATION DATA:
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                                                                                                                                                                                                           COMPUTER: IBM CON
OPERATING SYSTEM:
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hes 42; Conserv
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                              NAME: Haile, Ph.D., Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 09015/002001
                                                                                                                                                                                                                                                                                 COUNTRY: UZIP: 92037
                                                                                                                                                                                                                                                                                                                CITY: La Jolla
STATE: .CA
                                                                                                                                                                                                                                                                                                                                               ADDRESSEE: Fish & Richardson P.C.
STREET: 4225 Executive Square, Suite 1400
TELEPHONE:
                                                                                                                                                FILING DATE:
                                                                                                                 APPLICATION NUMBER:
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Adhikari, Robert S.
VENTION: CATALASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LINEAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robertson, Dan E.
                                                                                                                                                                                                                               IBM Compatible
                                                                                                                                                                                                                                                  Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SINGLE
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                                                                                                                                                                                                                 Windows95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08/674,887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   us/08/951,844
                                                                                                                                                                 US/09/412,347
                                                                                                                   08/674,887
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Pred. No. 5.9;
0; Mismatches
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; NAME/KEY:
; LOCATION:
US-08-461-244-1
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    Ouery Match 19.
Best Local Similarity 68.
Matches 35; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/08461244
Patent No. 5776729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                  TELEFAX: 201-994-1744 INFORMATION FOR SEQ ID NO: 1:
                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 1586 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                               COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                             TELECOMMUNICATION INFORMATION: TELEPHONE: 201-994-1700
                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: FEITAIO, Gregory D.
REGISTRATION NUMBER: 36,134
REFERENCE/DOCKET NUMBER: 32
                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                       FEATURE:
                                                                                                                   MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: HUMAN G-PROTEIN RECEPTOR HGBER32 NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/461,244
FILING DATE: 05-JUN-1995
CLASSIFICATION: 536
                                                                                                                                 TOPOLOGY:
                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        73 TTTTGTTGT 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity hes 42; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                              07068
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New Jersey
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Soppet, Daniel R. Yi, Li
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                                                                                                                             linear
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                19.7%;
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                Score 25.4; D
Pred. No. 7.1;
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    Mismatches
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                             DB 1;
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                             Length 1586;
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Gaps
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US-09-221-017B-174
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                                                        Query Match
Best Local
                                      Matches
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Patent No.
                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO:
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                                                                                                                                               ORGANISM: FEATURE:
                                                                                                                                                                            ORIGINAL SOURCE
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE/DOCKET NUMBER: 27
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-813-5600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: PP2911
FILING DATE: 09-APR-1998
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
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APPLICATION NUMBER: PP11
FILING DATE: 31-DEC-1997
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ADDRESSEE: MORRISON & FOERSTER
STREET: 755 PAGE MILL ROAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1165 AATGACCACAATGAGCACCAACCTGATGGCCTTGGTCTTGTTGTTTTG 1115
                                                                                                                                                                                                           MOLECULE TYPE: DE
                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 10-DEC-1998 ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                                                            ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
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NUMBER OF SEQUENCES:
                                                                                                                                                                                                      YPOTHETICAL:
                                                                                                            NAME/KEY: misc_feature LOCATION: 1...3302
                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: PP1546 FILING DATE: 30-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09 FILING DATE: 23-DEC-1998
TOPOLOGY:
                                                                                                                                                                                                                                                     TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                               TELEFAX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                     ENGTH:
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                                      50;
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b. 6444799
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94304-1018
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                                                                                                                                                                                                                                                                                                                                                                                                                             Monroy, Gladys H
                                                                                                                                                                                                                                                                                   3302 base pairs
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                                     Conservative
                                                                                                                                                                                           UNKNOWN
                                                                                                                                                                                                                                        circular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ROSS, Bruce C.
TENTION: P. GINGIVALIS NUCLEOTIDES AND USES THEREOF
EQUENCES: 1120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FastSEQ for Windows Version
                                                                                                                                                          PORYPHYROMONAS GINGIVALIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IBM Compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Diskette
                                                                                                                                                                                                                        DNA (genomic)
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10-DEC-1998
                                                  19.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                           32,430
                                                Score 25.4; D
Pred. No. 9.6;
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                                   Mismatches
                                                              DB 4;
                                   41;
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921 GAAATCCAGCTCCACTCCATCGCTGACAGCATCGCTGATCTCCAACGATTCGGCCTGGAT 980

62

GGTCGGGGTCTTTTTGTTGTGGTGCTGTGAC 92

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-08-247-901C-1
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INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 50341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        quence 1, Application US/08247901C
tent No. 5750384
                                                                                                             ORGANELLE:
IMMEDIATE SOURCE:
POSITION IN GENOME:
CHROMOSOME/SEGMENT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/08/247, FILING DATE: May 23, 1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/057,531
FILING DATE: April 29, 1993
                                                                                                                                                                                                                                                                                                                  FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                   DESCRIPTION:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 697-5995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
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             IDENTIFICATION METHOD:
OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             981 TTGCTGGGCGATATAGTCATGGTGCTCTGCC 1011
                                                                                                                                                                                 CELL TYPE:
                                                                                                                                                                                                                                                INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE
                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Bogosian, Elizabeth A
REGISTRATION NUMBER: 39,911
REFERENCE/DOCKET NUMBER: 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM: MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY:
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                                                              NAME/KEY:
                                                                                                                                                                                                                  TISSUE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX:
                                                                                                                                                                                                                                   HAPLOTYPE:
                                                                                                                                                                                                                                                                                                  ORGANISM:
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AUTHORS:
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: New York
RY: U.S.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (212)
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                                                                                                                                                                                                                                                                                               L5 mycobacteriophage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM PC Compatible
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                                                                                                                                                                                                                                                                                                                                                                                    L5 shuttle phasmid sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         inch 1.44 Mb storage diskette
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               NO.
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Best Local Similarity
Matches 36; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION DATA:
PRIOR APPLICATION NUMBER: 08/247,901
                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION: TELEPHONE: (212) 697-5995
                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: May 23, 199 ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inc
                                                                                     ANTI-SENSE:
FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                              DESCRIPTION:
HYPOTHETICAL:
                                                                                                                                                              TOPOLOGY: ]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL: VOLUME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         54 ACCGAGATGGTCGGGGTCTTTTTGTTGTGGTGCTGTGACGTGTTGTCCAACCGT 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
PUBLICATION DATE:
RELEVANT RESIDUES IN SEQ ID NO:
                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 39, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: M
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TLE OF INVENTION:
                             DEVELOPMENTAL STAGE:
                                                                      ORGANISM: L5 mycobacteriophage
                                                                                                                                                                                         STRANDEDNESS: single
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                                                                                                                                                                                                                                                                                                TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAGES:
HAPLOTYPE:
TISSUE TYPE:
                                                           STRAIN
                                             INDIVIDUAL ISOLATE
                                                                                                                                                                                                                        ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New York
: New York
RY: U.S.A.
                                                                                                                                                                                                     nucleic acid
                                                                                                                                                                                                                                                                                                                                                           Bogosian, Elizabeth A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90 Park Avenue
                                                                                                                                                                                                                                                                  (212) 286-0854 or 286-0082
WX 710-581-4766
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Word Processor (ASCII)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM PC Compatible
SYSTEM: MS-DOS
                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amster,
                                                                                                                                 L5 shuttle phasmid sequence No
                                                                                                                                                                                                                                                                                                                                                                                                                                                  May 11, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inch 1.44 Mb storage diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         et al.
L5 SHUTTLE PHASMIDS
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                                                                                                                                                                                                                                                                                                                                96700/475
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Pred. No. 34;
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ELL TYPE:

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US-09-426-436-1
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Rest Local Similarity bo.,
36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                          FILING DATE: February 7, ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                     SOFTWARE: Word Processor (ASCII)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch 1.44 Mb storage diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tent No. 6225066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . 1876 ACCGTGACCATCGCGACTCGCTGATGTCGAGCTGGGACGTATTCCCCGGCCGT 1929
           REGISTRATION NUMBER: 34,894
REFERENCE/DOCKET NUMBER: 96
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                       CLASSIFICATION: PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
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OTHER INFORMATION:
PUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            POSITION IN GENOME:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CELL LINE:
ORGANELLE:
IMMEDIATE SOURCE:
                                                                                                                                                             FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               54 ACCGAGATGGTCGGGGTCTTTTTGTTGTGGTGCTGTGACGTGTTGTCCAACCGT 107
                                                                                                                               FILING DATE:
                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                          FILING DATE
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                                                                                                                                                                                                                                                                                      OPERATING SYSTEM:
FELEPHONE:
                                                                                                             APPLICATION NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHROMOSOME/SEGMENT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AME/KEY:
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                                                      Pasqualini, Patricia A.
                                                                                                                                                                                                                                                                                                                                                       10016
                                                                                                                                                                                                                                                                                                                                                                                                  New York
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                                                                                                                                                                                                                                                                                                                                                                                   New York
                                                                                                                                                                                                                                                                                                                                                                                                             90 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                 U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            William R. Jacobs, Jr.
Barry R. Bloom
Graham F. Hatfull
                                                                                                                                                                                                                                                                                    IBM PC Compatible SYSTEM: MS-DOS
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                                                                                                           07/833,431
                                                                                                                                         us/08/057,531
                                                                                                                                                                         US/08/705,557
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Pred. No. 34;
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US-08-705-557-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 66.7 Matches 36; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                      tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: TWX 710-581-4766 INFORMATION FOR SEQ ID NO: 1:
                                              COMPUTER READABLE FORM: MEDIUM TYPE: 3.5 inc
                                                                                                                                                                                                                                                                                                                                                                                             1773 ACCGTGACCATCGGCGACTCGCTGATGTCGAGCTGGGACGTATTCCCCCGGCCGT 1826
                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PUBLICATION INFORMATION:
                                                                                                                                                                                                         TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE TYPE: not applicable
CELL TYPE: not applicable
CELL LINE: not applicable
ORGANELLE: not applicable
ORGANELLE: not applicable
ORGANELLE: not applicable
IMMEDIATE SOURCE: mycobacteriophage L5 particles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN: not applicable INDIVIDUAL ISOLATE: L5
DEVELOPMENTAL STAGE: not applicable HAPLOTYPE: not applicable TISSUE TYPE: not applicable
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HYPOTHETICAL:
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                                                                                                                                                                                                                                                                                                                                                                                                                           54 ACCGAGATGGTCGGGGGTCTTTTTGTTGTGGTGCTGTGACGTGTTGTCCAACCGT 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAGES:
                                                                                            COUNTRY:
                                                                                                                STATE:
                                                                                                                            CITY: New York
                                                                                                                                              STREET:
                                  COMPUTER:
                                                                                                                                                             ADDRESSEE:
                OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IDENTIFICATION METHOD
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                                                                                 10016
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                                                                                                              New York
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                                                                                                                                              90 Park Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A Phage System
                                                                                                                                                                                                                                       Barry R. Bloom
Graham F. Hatf
                                                                                              U.S.A.
                                                                                                                                                                                                                                                                        William R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular Microbiology
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                                 IBM PC Compatible
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Word Processor (ASCII)
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                                                                                                                                                             Amster,
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                                            inch 1.44 Mb storage diskette
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                                                                                                                                                                                                        MYCOBACTERIAL SPECIES-SPECIFIC REPORTER MYCOBACTERIOPHAGES
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Pred. No. 35;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
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TELEX: TWX 710-581-4766
INFORMATION FATICS: 12297
TYPE: nurol
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; VOLUME: 7
; PAGES: 395-405
; DATE: 1993
US-08-705-557-1
Search completed: December 25, 2002, 12:59:44
Job time: 89.3364 secs
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                                                                                                                                Query Match 19.5
Best Local Similarity 66.7
Matches 36; Conservative
                                                              DEVELOPMENTAL STAGE: not applicable
HAPLOTYPE: not applicable
TISSUE TYPE: not applicable
CELL TYPE: not applicable
CELL LINE: not applicable
ORGANELLE: not applicable
IMMEDIATE SOURCE: mycobacteriophage L5 particles
POSITION IN GENOME: entire genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HYPOTHETICAL: no
ANTI-SENSE: no
FRAGMENT TYPE: not applicable
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                       LOCATION:
IDENTIFICATION METHOD:
OTHER INFORMATION:
PUBLICATION INFORMATION:
AUTHORS: Matfull and Sarkis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: February 7,
ATTORNEY/AGENT INFORMATION:
NAME: Pasqualini, Patric
REGISTRATION NUMBER: 34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/057,
FILING DATE:
APPLICATION NUMBER: 07/833,431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/705,557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: nucleotide
STRANDEDNESS: single
TOPOLOGY: linear
DLECULE TYPE:
DESCRIPTION: phage genome sequence
TOPOTHETICAL: no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: mycobacteriophage L5
STRAIN: not applicable
INDIVIDUAL ISOLATE: L5
DEVELOPMENTAL STAGE: not applic
                                                                                                                                                                                                                                                                                                     TITLE: DNA Sequence, Structure and Gene
TITLE: Expression of Mycobacteriophage L5:
TITLE: A Phage System for Mycobacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                              IAME/KEY:
                                                                                                                                                                                                                                                                       Molecular Microbiology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    February 7, 1992
                                                                                                                                                   19.5%;
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                                                                                                                                   0; Mismatches
                                                                                                                                                   Score 25.2;
Pred. No. 35;
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Maximum
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Perfect score:
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        IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
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1693.523 Million cell updates/sec
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Published_Applications_NA:*
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Listing
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/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_DUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US08_DUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
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/cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US10_PUBCOMB.seq:*
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10 US-09-785-770A-14
11 US-09-529-063-42
12 US-09-983-965-773
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14 US-09-9815-242-6127
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                                                                                                                                       Sequence 1, Appli
Sequence 31, Appl
Sequence 31, Appl
Sequence 64, Appl
Sequence 64, Appl
Sequence 15, Appl
Sequence 14, Appl
Sequence 41, Appl
Sequence 42, Appl
          Sequence 157, App
Sequence 4, Appli
Sequence 4, Appli
Sequence 3, Appli
Sequence 1959, Ap
Sequence 1959, Ap
                                                                                            Sequence 41, Appl
Sequence 42, Appl
Sequence 5288, Ap
Sequence 773, App
Sequence 143, App
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US-09-938-842A-5282	US-09-815-242-8046	US-09-815-242-4426	05-09-974-300-715	05-09-86/-/UT-1593	DG -00 -000 -107 -1700	IIS-09-880-107-1700	US-09-954-456-2053	US-09-954-456-738	US-09-820-893-30	US-09-974-300-4310	US-09-974-300-4253	US-09-880-107-1376	US-09-938-842A-1762	05-09-9/4-300-29/6	TC-00-034 306 E30	US-09-960-353-109	US-09-815-242-9287	US-09-104-792-1	US-09-887-576-663	US-09-938-842A-1836	US-09-969-347-138	US-09-884-889-5	US-09-815-242-6165	US-09-934-868-17	US-09-934-901-7	US-09-764-869-2419	US-09-764-869-2417
Sequence 5282, Ap		4426	Sequence 715, App	Sequence 1593, Ap	Sequence 1700, Ap	bequence 2003, Ap	ddw 'oc 'ocace			Secuence 4310 as	Sequence 4253 An	٠,	Sequence 1762, Ap	Sequence 2976, Ap	sequence 198, App	Dequence 3207, Ap	Secuence 1, April	Section 1 April 2	Sequence 663 App	Sequence 1836. An	Sequence 138 Ann	Segmence 5 applia	Segmence Alas and	Segmence 17 April	Sequence 7 Appl	Sequence 2419. An	Sequence 2417 An

ALIGNMENTS

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LENGTH: 600
TYPE: DNA
ORGANISM: Bifidobacterium longum
FEATURE:
NAME/KEY: CDS
LOCATION: (193)..(471)
US-09-816-391A-1
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SEQ ID NO 1
                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1, Application US/09816391A Patent No. US20020054865A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SASAKI, Takayuki
TITLE OF INVENTION: Anaerobic bacterium as a drug for cancer gene therapy
FILE REFERENCE: 2001-WMC/01736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: FUJIMORI, Minoru
APPLICANT: TANIGUCHI, Shunichiro
APPLICANT: AMANO, Jun
APPLICANT: YAZAWA, Kazuyuki
APPLICANT: KANO, Yasunobu
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
121 AGTTCAGCG 129
                                                                                             129;
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KANO, Yasunobu
NAKAMURA, Toshiyuki
                                                                                                                                                                Conservative
                                                                                                                                                          100.0%; Score 129; DB 10; 100.0%; Pred. No. 4.4e-37; tive 0; Mismatches 0;
                                                                                                                                                                                    Length 600;
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592 AGTTCAGCG

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SEQUENCE DESCRIPTION: SEQ ID NO: 31: US-10-027-805-31
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US-09-903-410-31
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Patent No. US20020164725A1
GENERAL INFORMATION:
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Best Local Similarity
Matches 53; Conserv
                GENERAL
                             Sequence 31, Application US/09903410 Patent No. US20020146799A1
APPLICANT: DIVERSA CORPORATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: 619-678-5099
INFORMATION FOR SEQ ID NO: 31:
SEQUENCE CHARACTERISTICS:
                                                                                                                                      778 GAAGGAGAAGTTTTCGGGCAGATGCTGAGAAGAG 811
                                                                                                                                                                                                        718 GACCTTGAGAACCTACCTCCTGCGCTGATCATAACCGCCGAATACGACCCGCTGAGAGAT 777
                                                                                                                                                                     62 GGTCGGGGTCTTTTTGTTGTGGTGCTGTGACGTG 95
                                                                                                                                                                                                                                           NAME: HAILE, LISA A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 09
TELECOMMUNICATION INFORMATION:
TELEPHONE: 619-678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PS/2
OPERATING SYSTEM: MS-DOS
SOFTWARE: WORD PERFECT 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 08/602,359 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
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TITLE OF INVENTION: ESTERASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: LINEAR MOLECULE TYPE: GENOMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: US/10/027,805 FILING DATE: 21-Dec-2001 CLASSIFICATION: <Unknown>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: LA JOLLA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 4225 EXECUTIVE SQUARE, STE 1400
                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: NUCLEIC ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 936 NUCLEOTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OF SEQUENCES: 42
                                                                                                                                                                                                                                                                                Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAFFIA,
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; TYPE: DNA
; ORGANISM: Archaeoglobus fulgidus
US-09-903-410-31
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Best Local Similarity 56.4%;
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 64, Application US/09938842A
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PRIOR FILING DATE: 1999-08-24
PRIOR APPLICATION NUMBER: US 08/602,359
PRIOR FILING DATE: 1996-02-16
NUMBER OF SEQ ID NOS: 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. US2
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                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/938.842A
CURRENT FILING DATE: 2001-08-24
PRIOR APPLICATION NUMBER: US 60/227,866
PRIOR FILING DATE: 2000-08-24
PRIOR APPLICATION NUMBER: US 60/264,647
PRIOR FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wang, Xun
APPLICANT: Zhu, Tong
TITLE OF INVENTION: STRESS-REGULATED GENES OF
TITLE OF INVENTION: SAME, AND METHODS OF USE
FILE REFERENCE: SCRIP1300-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/903,410 CURRENT FILING DATE: 2001-07-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: ENZYMES HAVING ESTERASE ACTIVITY AND METHODS OF USE THEREOFFILE REFERENCE: DIVER1180-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT:
                                                                                                                                                                                   LENGTH: 2451
TYPE: DNA
ORGANISM: Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  718 GACCTTGAGAACCTACCTCCTGCGCTGATCATAACCGCCGAATACGACCCCGCTGAGAGAT 777
                                 791
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                                                     TTGTTGTGGTGCTGTGACGTGTTGTCCAACCGTATTATTCCGGACTAGTT 124
                                 TGGCTCCTCGTGCAAGGATTGCTGTTTACAAAGCTCTCTACCGACTTTTTGGAGGCTTTG 850
                                                                                                                   Similarity
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Pred. No. 1.
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                                                                                                       Mismatches
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                                                                                                     51; Indels
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                                                                                                                                     Length 2451;
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PRIOR APPLICATION NUMBER: 60/063870
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/064103
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066120
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/066466
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066466
PRIOR FILING DATE: 1997-11-24
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Sequence 591, Application US/10052586
Patent No. US20020127584A1
                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
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TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
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OR FILING DATE: 1997-10-17
OR APPLICATION NUMBER: 60/063120
OR FILING DATE: 1997-10-24
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OR APPLICATION NUMBER: 60/063486
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OR APPLICATION NUMBER: 60/063540
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                                                                                      APPLICATION NUMBER: 60/068017 FILING DATE: 1997-12-18 APPLICATION NUMBER: 60/077450 FILING DATE: 1998-03-10
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APPLICATION NUMBER: 60/
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FILING DATE: 1997-12-12
APPLICATION NUMBER: 60/069870
FILING DATE: 1997-12-17
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APPLICATION NUMBER: 60/063734
FILING DATE: 1997-10-29
                                                             APPLICATION NUMBER: 60/077632
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FILING DATE: 1997-12-11
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Watanabe, Colin R
Wood, William I.
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UMBER: 60/077649
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PRIOR APPLICATION NUMBER: 60/083496
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PRIOR FILING DATE: 1998-04-28
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OR APPLICATION NUMBER: 60/08414
OR FILING DATE: 1998-05-06
OR APPLICATION NUMBER: 60/084639
OR APPLICATION NUMBER: 60/084640
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OR APPLICATION NUMBER: 60/085700
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OR FILING DATE: 1998-05-18
OR APPLICATION NUMBER: 60/086023
OR FILING DATE: 1998-05-18
                                                APPLICATION NUMBER: 60/087098
FILING DATE: 1998-05-28
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FILING DATE: 1998-05-28
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FILING DATE: 1998-04-21
APPLICATION NUMBER: 60/082704
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APPLICATION NUMBER: 60/0
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FILING DATE: 1998-04-08
APPLICATION NUMBER: 60/081070
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APPLICATION NUMBER: 60/080327
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FILING DATE: 1998-04-09
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FILING DATE: 1998-03-27
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                 AACCGTATTATTCCGGACTAGTTCAGC 128
                                                               AAAAAGACCATCATCTACATTGTCAGGGTCACTATAATCTGTTGCTGACTGTGGTTTCCC 1276
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RESULT 6
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US-09-785-770A-15
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US-09-785-770A-14/c
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SEQ ID NO 15;
LENGTH: 5721
TYPE: DNA
ORGANISM: HOMO
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Best Local Similarity
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TITLE OF INVENTION: A NOVEL PROTEIN RELATED TO MELANOMA-INHIBITING PROTEIN
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: 07334-328001
                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: A NOVEL PROTEIN RELATED TO MELANOMA-INHIBITING PROTEIN TITLE OF INVENTION: AND USES THEREOF FILE REFERENCE: 07334-328001 CURRENT APPLICATION NUMBER: US/09/785,770A CURRENT FILING DATE: 2001-02-16
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PRIOR FILING DATE: 1999-09-01
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                                                      ORGANISM: Homo sapiens FEATURE:
NAME/KEY: 5'UTR
LOCATION: (1)...(4)
NAME/KEY: CDS
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PRIOR APPLICATION 1999-09-01
PRIOR APPLICATION NUMBER: US 09/145,056
PRIOR FILING DATE: 1998-09-01
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APPLICANT: Barnes,
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  NAME/KEY:
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(5726)...(8121)
                                      (5)...(5725)
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                                                                                                                                                                                                                                                                                                                                                                                                                             Thomas M.
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57.5%;
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Pred. No. 2.
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US-09-529-063-42/c

; Sequence 42, Application US/09529063

; Patent No. US20020102542A1
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US-09-529-063-41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 41
LENGTH: 1422
                                                        SOFTWARE: PatentIn Ver. SEQ ID NO 42
                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION
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                                                                                            PRIOR APPLICATION NUMBER: JP 9-274674
PRIOR FILING DATE: 1997-10-07
NUMBER OF SEQ ID NOS: 117
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                                                                                                                                              PRIOR APPLICATION NUMBER: PCT/JP98/04514
PRIOR FILING DATE: 1998-10-06
                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/529,063
CURRENT FILING DATE: 2000-04-07
                                                                                                                                                                                                                   TITLE OF INVENTION: POLYPEPTIDE, CDNA ENCODING THE POLYPEPTIDE, TITLE OF INVENTION: THE BOTH FILE REFERENCE: Q58769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: JP 9-274674 PRIOR FILING DATE: 1997-10-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/529,063
CURRENT FILING DATE: 2000-04-07
PRIOR APPLICATION NUMBER: PCT/JP98/04514
PRIOR FILING DATE: 1998-10-06
                                                                                                                                                                                                                                                                      APPLICANT: SHIBAYAMA, SHIRO
APPLICANT: TADA, HIDEAKI
                                                                                                                                                                                                                                                                                                     APPLICANT: FUKUSHIMA, DAIKICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 1997-10-07
NUMBER OF SEQ ID NOS: 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENERAL INFORMATION:
APPLICANT: FUKUSHIMA, DAIKICHI
       ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: SHIBAYAMA, SH
APPLICANT: TADA, HIDEAKI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ITLE OF INVENTION: POLYPEPTIDE, CDNA ENCODING THE POLYPEPTIDE, AND USE ITLE OF INVENTION: THE BOTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1339 AAAAAGACCATCATCTACATTGTCAGGGTCACTATAATCTGTTGCTGACTGTGGTTTCCC 1280
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US-09-983-965-773/c
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TITLE OF INVENTION:
                                                                     APPLICANT:
                                                      APPLICANT:
                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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LOCATION:
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T: Mathlalagan, Nagappan
INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND
INVENTION: MUSCLE AND FAT DEPOSITION
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                                Byatt, John (
Mathialagan,
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GENERAL INFORMATION:
                                                                          Sequence 773, Application US/09983965 Patent No. US20020137160A1
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SEQ ID NO 5288
LENGTH: 386
                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
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                                  APPLICANT: Warren, Wesley C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Byatt, John C.
APPLICANT: Mathialagan, Nagappan
TITLE OF INVENTION: NUCLEIC ACID AND OTHER MOLECULES ASSOCIATED WITH LACTATION AND TITLE OF INVENTION: NUSCLE AND FAT DEPOSITION
FILE REFERENCE: 37-21(10297)C
CURRENT APPLICATION NUMBER: US/09/983,965
CURRENT FILING DATE: 2001-10-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 09/465,231
PRIOR FILING DATE: 1999-12-15
PRIOR APPLICATION NUMBER: US 60/113,678
PRIOR FILING DATE: 1998-12-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Warren,
                                                                                                                                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: Clone ID: 39-LIB34-040-Q1-E1-B4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Bos taurus FEATURE:
                                                                                                                                                                                                                               108 ATTATTCCGGACTAGTT 124
                                                                                                                                                                                                                                                                270 ATCCCTCACCTCCTGGGCGATGTGGTTTTCTTGTGGGGCTGTAACCTGCTGGCCCACTTC 329
                                                                                                                                                                                                                                                                                                      48 ACCCCGACCGAGATGGTCGGGGTCTTTTTGTTGTGGTGCTGACGTGTTGTCCAACCGT 107
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                Tao, Nengbing
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John C
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Pred. No. 1
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Pred. No. 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/113,678
PRIOR FILING DATE: 1998-12-17
NUMBER OF SEQ ID NOS: 5912
SEQ ID NO 773
LENGTH: 406
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Best Local Similarity
Matches 46; Conserv
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CURRENT APPLICATION NUMBER: U2/09/983,965
CURRENT FILING DATE: 2001-10-26
PRIOR APPLICATION NUMBER: US 09/465,231
PRIOR FILING DATE: 1999-12-15
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                                            INFORMATION FOR SEQ ID NO: 143:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48 ACCCCGACCGAGATGGTCGGGGTCTTTTTGTTGTGGTGCTGTGACGTGTTGTCCAACCGT 107
                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/799,777
FILING DATE: 06-Mar-2001
OF ACCURENCE OF ABST-2001
SEQUENCE CHARACTERISTICS:
LENGTH: 1864 base pairs
                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: BILLINGS, LUCY J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0459 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: HUMAN SIGNAL PEPTIDE-CONTAINING PROTEINS NUMBER OF SEQUENCES: 154
                                                                                    TELECOMMUNICATION INFORMATION: TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
                                                                                                                                                                                                                APPLICATION NUMBER: US/09/002,485 FILING DATE: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: PALO ALTO
                                                                  TELEFAX:
                                                                                                                                                                                                                                                                              CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/09799777
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94304
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sather, Susan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baugh, Mariah
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lal, Preeti
                                                                (650)
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                                                                  845-4166
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Pred. No. 1
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; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID
US-09-974-298-157
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US-09-974-298-157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-0
NUMBER OF SEQ ID NOS: 194
SOFTWARE: PERL Program
SEQ ID NO 157
LENGTH: 2096
                                                                                                                                                                                                     GENERAL
                                                                                                                                                                                                                  Sequence 6127, Application US/09815242 Patent No. US20020061569A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local 9
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                                                                                        APPLICANT:
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CURRENT FILING DATE: 2001-10-04
PRIOR APPLICATION NUMBER: 60/238,331
                                                                                                                                         APPLICANT: Haselbeck, Robert
APPLICANT: Ohlsen, Kari L.
APPLICANT: Zyskind, Judith W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chen, Huei-Mei
TITLE OF INVENTION: GENES EXPRESSED IN BREAST CANCER
FILE REFERENCE: PA-0037 P
                                                                                                                          APPLICANT:
                                                     APPLICANT:
                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                 ITLE OF INVENTION: Identification of Essential Genes ITLE OF INVENTION: Prokaryotes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              719 CTGCTGGGATTCTTCGTTGGATTAATCCCTCACCTCCTGGGCGATGTGGTTTTCTTGTGG 778
                                                                                                                                                                                                                                                                                                                                                                                                          719 CTGCTGGGATTCTTCGTTGGATTAATCCCTCACCTCCTGGGCGATGTGGTTTTCTTGTGG 778
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                                                                                                                                                                                                                                                                                                                                 779 GGCTGTAACCTGCTGGCCCACTTCATCAATGCCTACCTGGT 819
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                                                                                                                                                                                                                                                                                                                                                                                                                                           24 CTTCGAGCATTACTGACGACAAAGACCCCGACCGAGATGGTCGGGGGTCTTTTTGTTGT 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84 TGCTGTGACGTGTTGTCCAACCGTATTATTCCGGACTAGTT 124
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REFERENCE: ELITRA.011A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IMMEDIATE SOURCE:
                                                                                                                                                                                                     INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 54.5%;
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                                                                    Wall, Daniel
Trawick, John D.
Carr, Grant J.
Yamamoto, Robert T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLONE: 2964329
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                                                 Xu, H. Howard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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Pred. No. 2.
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Pred. No. 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
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CURRENT APPLICATION NUMBER: US/09/815,242 CURRENT FILING DATE: 2001-03-21

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GENERAL INFORMATION:

APPLICANT: CONKIIO, DATFELL C.

APPLICANT: GAO, Zeren
TITLE OF INVENTION: NOVEL PROTEIN ZIMDA2
FILE REPERENCE: 00-67
CURRENT APPLICATION NUMBER: US/09/990,017
CURRENT FILING DATE: 2000-11-21
PRIOR APPLICATION NUMBER: US 60/252,374
PRIOR PILING DATE: 2000-11-21
NUMBER OF SEO ID NOS: 6
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 792
TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                      PEATURE:
OTHER INFORMATION: degenerate sequence
NAME/KEY: misc_feature
LOCATION: 12, 15, 36, 39, 42, 45, 54, 60, 63, 66
LOCATION: 10, 105, 108, 111, 114, 117, 120, 123
LOCATION: 162, 168, 174, 180, 183, 186, 189, 198
LOCATION: 22, 228, 231, 234, 240, 246, 249, 252
OTHER INFORMATION: n = A,T,C or G
NAME/KEY: misc_feature
LOCATION: 378, 384, 393, 396, 399, 402, 405, 408
LOCATION: 378, 384, 393, 396, 399, 402, 405, 408
LOCATION: 378, 384, 393, 396, 399, 402, 405, 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: (1)...(2628)
US-09-815-242-6127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILLING DATE: 2000-05-23
PRIOR FILLING DATE: 2000-05-26
PRIOR PELLORITION NUMBER: 60/207,727
PRIOR PILLING DATE: 2000-10-23
PRIOR PELLORITION NUMBER: 60/242,578
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILLING DATE: 2000-11-27
PRIOR FILLING DATE: 2000-11-27
PRIOR APPLICATION NUMBER: 60/257,931
PRIOR APPLICATION NUMBER: 60/269,308
PRIOR FILLING DATE: 2001-102-16
PRIOR FILLING DATE: 2001-02-16
PRIOR FILLING DATE: 2001-02-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 59; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4, Application US/09990017 Patent No. US20020115168A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Fas
SEQ ID NO 6127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 14110
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ORGANISM: Escherichia coli
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH: 2628
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67 GGGTCTTTTTGTTGTGGTGCTGTGACGTGTTGTCCAACCGTATTATTCCGGA 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 27.2; DI
Pred. No. 2.9;
  303,
402,
486,
549,
  306,
405,
498,
552,
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123,
198,
252,
  309,
408,
504,
321,
423,
510,
585,
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126,
204,
258,
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6, 144, 147, 1
4, 210, 213, 2
8, 261, 264
  327,
426,
513,
591,
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153,
219,
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Best Local Similarity
Matches 31; Conserva
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US-09-990-017-4
                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
LOCATION: 597, 618, 63/
LOCATION: 702, 705, 701
LOCATION: 765, 771, 77
| |: |:||:|| ||:|
583 TRIGRITYTTYTTRT 566
                                                                           643 CYTTYTTRTCRTCNCKRTGDATCATNACRTCRCARTTDATRTCYTTNCCNACNSWDATNG 584
                                     64 TCGGGGTCTTTTTGTTGT 81
                                                                                                               Conservative
                                                                                                                                                                                                                                                   618, 630, 648, 651, 654, 657, 660, 663, 678, 696, 699, 705, 708, 711, 714, 717, 720, 723, 729, 738, 750, 756, 771, 777, 780, 783, 789, 792

ION: n = A,T,C or G
                                                                                                                                                                       20.8%; Score 26.8; DB 10; 39.7%; Pred. No. 2.6;
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                                                                                                                                                       Mismatches
                                                                                                                                                                                         Length 792;
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Search completed: December 25, 2002, 12:34:36
Job time: 39.9439 secs